



Automation for a Changing World

Delta Programmable Logic Controller DVP Series



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Smarter. Greener. Together.

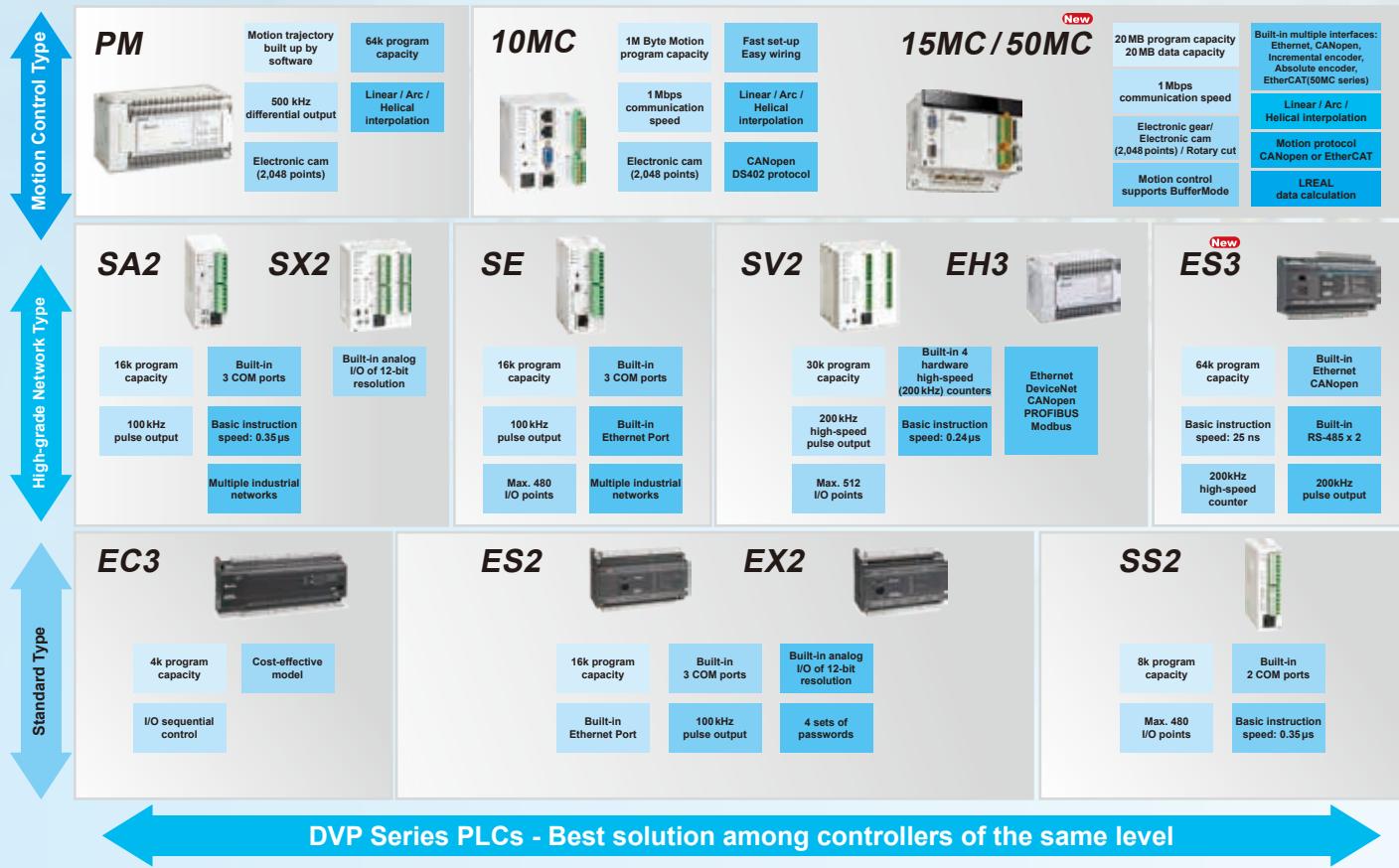
The Perfect Small PLC Revolution!

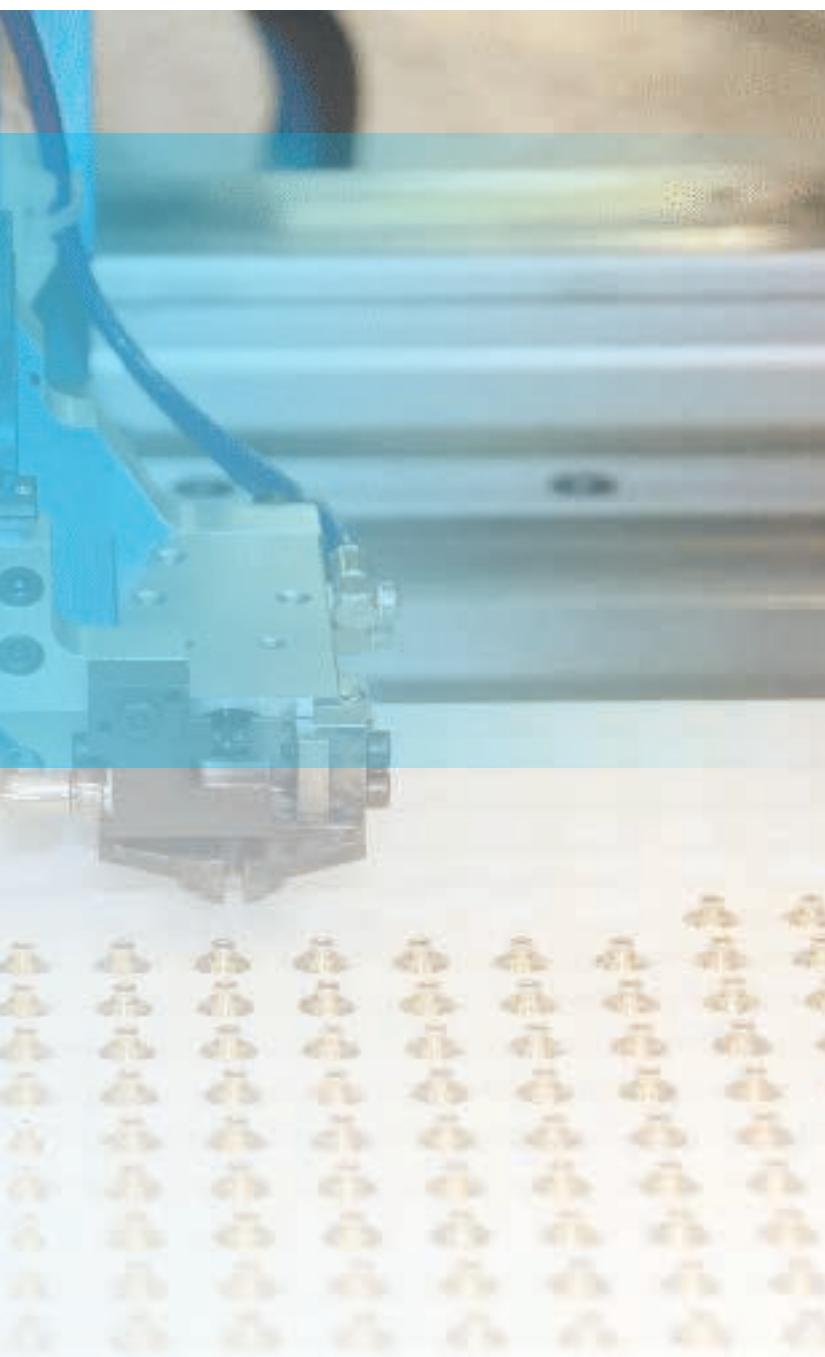
After launching our first DVP series PLCs for industrial automation applications, Delta has been devoted to delivering more innovative products that satisfy customers' needs and meet the requirements of a wide variety of applications.

Delta PLCs offer a broad range of controllers and modules which all feature high performance, multiple functions and efficient program editing tools. In addition to the user-friendly programming software and faster execution speed, we also provide complete industry-focused solutions, motion control solutions, and industrial fieldbus solutions with Delta's new PLC series.

We integrate our PLCs with industrial automation products to deliver total solutions for various field applications.

As your most reliable partner, Delta is dedicated to creating value for our customers.





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NEW

The 3rd Generation DVP-ES Series PLC Gives you better control experience with its NEW CPU



Standard PLC **DVP-ES3**

- ▶ Adopts the high performance processor (LD: 25 ns) of the Compact Modular Mid-range PLC AS Series
- ▶ Built-in 32 I/O points and supports high-speed counters / pulse-train outputs
- ▶ Built-in RS-485, Ethernet and CANopen
- ▶ Supports Modbus, Modbus TCP and EtherNet/IP
- ▶ Supports AS Series PLC instructions for higher scalability

Increased Built-in I/O Points to Enhance Competitiveness for Solutions

PLCs

DVP-28SS2 **DVP-28SA2** **DVP-26SE**

- ▶ 16DI + 12DO (DVP-28SS2, DVP-28SA2)
- ▶ 14DI + 12DO (DVP-26SE)
- ▶ Compatible with DVP-S Series extension modules (right-side)



Complete Interface Design and 24-axis Motion Control



CANopen Motion Controller **DVP15MC**

EtherCAT Motion Controller **DVP50MC**

- ▶ 1GHz CPU
- ▶ Program capacity + data capacity = 20MB + 20MB
- ▶ Up to 24 real axes control

Built-in Interface

16DI
8DO

RS-232

RS485

Ethernet
15MC: x2
50MC: x1

Memory
card:SD

CANopen
DS301

Motion
15MC: CANopen
DS402
50MC: EtherCAT

Incremental
encoder
interface*2

SSI absolute
encoder
interface

Motion Function

Multi-axis Gear
/ Cam

Linear / Arc
/ Helical
interpolation

Jerk

G-Code

Buffer
Mode



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Basic PLC DVP-EC3

Applicable for sequence control and simple RS-485/Modbus communication

- ▶ Built-in I/O: 10 / 14 / 16 / 20 / 24 / 30 / 32 / 40 / 48 / 60
- ▶ Program capacity: 4 k steps
- ▶ COM port: Built-in RS-232 & RS-485 ports (10 / 14-point models do not support RS-485), compatible with Modbus ASCII / RTU protocol
- ▶ Supports 2 points (Y0, Y1) of independent high-speed (max. 10 kHz) pulse output
(Hardware version V8.00 and above support this function)

Built-in High-Speed Counters

| 1-phase 1 input | | 1-phase 2 inputs | | 2-phase 2 inputs | |
|-----------------|-----------------|------------------|-----------|------------------|-----------|
| Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth |
| 2 / 2 | 20 kHz / 10 kHz | 1 | 20 kHz | 1 | 4 kHz |

Standard PLC / Analog I/O PLC DVP-ES2/EX2

Standard PLCs with integrated communication and highly efficient processing ability for your control systems

- ▶ 32-bit CPU for high-speed processing
- ▶ Standard PLC DVP-ES2 Series: 16 / 20 / 24 / 32 / 40 / 60 / 80 I/O points for a variety of applications
- ▶ Analog I/O PLC DVP-EX2:
 - Built-in 12-bit 4 analog inputs / 2 analog output; and 14-bit analog I/O extension module
 - Built-in PID auto tuning function for a complete analog control solution
- ▶ Built-in 1 RS-232 and 2 RS-485 ports
- ▶ Program capacity: 16 k steps
- ▶ Data register: 10 k words
- ▶ Max. execution speed of basic instructions: 0.35 µs
- ▶ RTC function and file register (5 k words) (hardware version 2.0 and above)
- ▶ Highly efficient processing ability: 1 k steps of programs can be completed within 1 ms
- ▶ Max. 100 kHz pulse control; specific motion control instructions (mark/masking and instant frequency changing) available for multi-axis applications
- ▶ Up to 4 levels of password protection secures your source programs and intellectual property

Built-in High-Speed Counters

| 1-phase 1 input | | 1-phase 2 inputs | | 2-phase 2 inputs | |
|-----------------|------------------|------------------|-----------|------------------|----------------|
| Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth |
| 2 / 6 | 100 kHz / 10 kHz | 2 | 100 kHz | 1 / 3 | 15 kHz / 5 kHz |



Standard PLC with built-in CANopen interface

DVP32ES200RC/TC

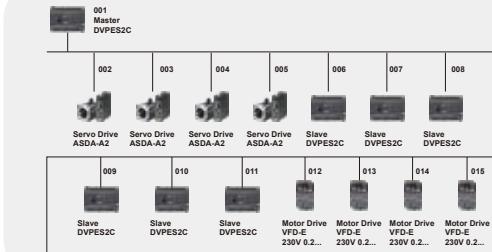
Boosts productivity with high execution speed and built-in CANopen interface, and specializes in noise-immunity and easy wiring

- ▶ Built-in 1Mbps CANopen interface; COM3 supports standard CANopen DS301 protocol
- ▶ Versatile communication types: PDO, SDO, synchronous (SYNC), Emergency, NMT and many more
- ▶ 1Mbps high-speed transmission for large data:
 - Max. PDO transmission: up to 390 bytes
 - Max. PDO receiving: up to 390 bytes
- ▶ Ability to connect with 16 slaves via CANopen
- ▶ Built-in 1 RS-232 and 1 RS-485 ports

Fast processing speed



High-speed industrial network: CANopen



Standard PLC with built-in Ethernet interface

DVP-ES2-E

Higher communication speed and easier external connection with built-in Ethernet

- ▶ Built-in I/O: 20/32/40/60
- ▶ Communication speed: 100M
- ▶ Supports Modbus and EtherNet/IP (slave)
- ▶ Built-in 1 RS-232 and 2 RS-485 ports

Temperature / Analog I/O PLC

DVP30EX200R/T

Integrated controller for temperature control and analog input

- ▶ Built-in 16-bit 3 analog inputs / 12-bit 1 analog output
- ▶ Built-in PID auto tuning function to offer a complete analog control solution
- ▶ 3 analog inputs for Pt / Ni temperature input, precision of 0.1 degree can be readily achieved

| Built-in Ethernet | | | |
|--|----------------------|--|---------------|
| Modbus | | EtherNet/IP | |
| Number of Connections | Server: 16 Client: 8 | Number of Connections | TCP: 4 CIP: 8 |
| Max. Data Exchange (each connection) | 100 words | Max. Data Exchange (each connection) | 250 words |
| | | RPI | 5~1,000 ms |
| | | PPS | 1,000 PPI |

| Built-in Analog I/O in DVP-EX2 Model | | | |
|--------------------------------------|-----------------------|---------------|---------------------|
| Analog Input | | Analog Output | |
| Channels | 3 | Channels | 1 |
| Resolution | 16-bit | Resolution | 12-bit |
| Spec. | -20~20 mA or -10~10 V | Spec. | 0~20 mA or -10~10 V |

| Built-in Temperature Control Function | | |
|---------------------------------------|--------------|--------------|
| Sensor | Pt100/Pt1000 | Ni100/Ni1000 |
| Temperature Range | -200°C~800°C | -100°C~180°C |
| Value Range | -2,000~8,000 | -1,000~1,800 |

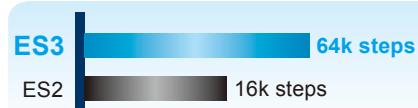


Standard PLC

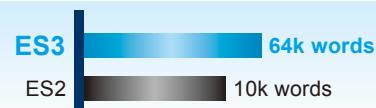
DVP-ES3 New

The 3rd Generation DVP-ES Series PLC provides higher performance with a new, upgraded CPU and multiple built-in communication interfaces

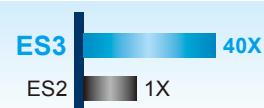
Program capacity



Data register



Execution speed



Outstanding Operation Performance

- ▶ Adopts the high performance processor of the Compact Modular Mid-range PLC AS Series
- ▶ Min. execution time of basic instruction: 25 ns

Excellent Motion Control

- ▶ High-speed counter: 200 kHz x 4
- ▶ High-speed pulse out: 200 kHz x 4 (pulse + direction) or 200 kHz x 8 (pulse)
- ▶ Supports 2-axis interpolation (linear and arc)
- ▶ Supports table structured position control function
- ▶ Supports 8 axes CANopen point-to-point motion control (with Delta servo drives only)

Built-in Communication Interfaces

- ▶ USB: For programming
- ▶ RS-485 x 2: Modbus RTU/ASCII
- ▶ Ethernet:
 - Modbus TCP: 16 / 16 connections (Server / Client)
 - EtherNet/IP: 8 / 16 connections (TCP / CIP)
- ▶ CANopen: DS301

Higher Specifications

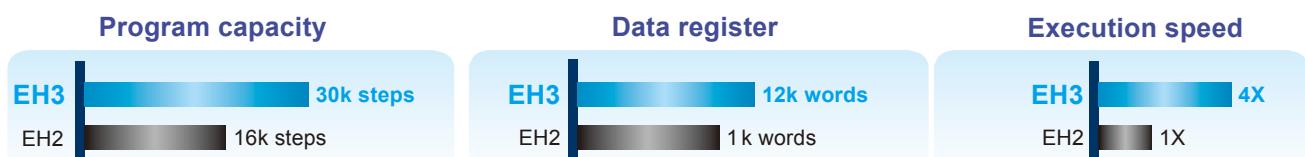
- ▶ Program capacity: 64k steps
- ▶ Data capacity: 64k words
- ▶ Built-in 32 DIO points
- ▶ Supports micro SD card



High Performance PLC

DVP-EH3

High-end model of Delta's DVP-E Series PLC with large program capacity and data registers for demanding and complex applications



Excellent Motion Control

- High-speed pulse output: 4 axes of 200 kHz pulse output (DVP32/40/48/64/80EH00T3)
- Supports max. 4 hardware 200 kHz high-speed counters
- Various motion control instructions to achieve high-speed and high-precision positioning control for labeling machines, packaging machines, printing machines and more applications
- Linear / arc interpolation motion control function
- Provides up to 16 external interrupt pointers

Complete Program Protection

- Auto backup function prevents program and data loss even when the battery runs out
- Secondary backup function saves an extra copy of programs and data to enhance program safety
- Up to 4 levels of password protection protects your source programs and intellectual property

Outstanding Operation Performance

- 32-bit CPU + ASIC dual processors support floating point operations
- Max. execution speed of basic instructions: 0.24 μ s

Flexible Function Extension Modules & Cards

- Multiple selections of extension modules and function cards: analog I/O, temperature measurement, additional single-axis motion control, high-speed counting
- 3rd serial communication port and Ethernet communication card are available

PLC Link

- PLC Link allows users to link up a max. of 32 units to the network without extra communication extension modules

Built-in 4 Hardware High-Speed Counters

| Standard | | Hardware high-speed counter | | | | | |
|-----------------|-----------|-----------------------------|-----------|------------------|-----------|------------------|-----------|
| 1-phase 1 input | | 1-phase 1 input | | 1-phase 2 inputs | | 2-phase 2 inputs | |
| Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth |
| 8 | 10 kHz | 4 | 200 kHz | 4 | 200 kHz | 4 | 200 kHz |

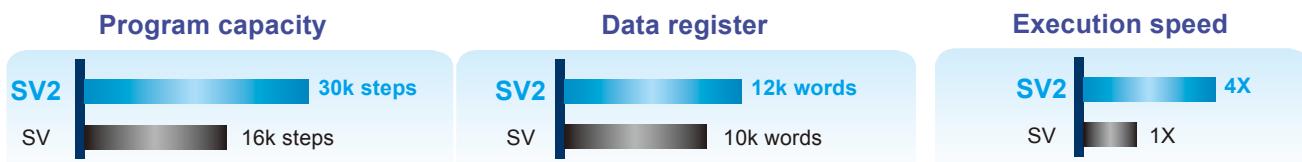
The specifications of high-speed input and output on this page are applicable only for DVP40EH00R3 / DVP40EH00T3.

Refer to the I/O specifications table on page 20 for more information on other models.



High Performance Slim PLC DVP-SV2

High-end model of the DVP-S Series with larger program capacities and data registers for more demanding and complex applications



Excellent Motion Control

- High-speed pulse output: 4 axes of 200 kHz pulse output
- Supports 4 hardware 200 kHz high speed counters
- Various motion control instructions to achieve high-speed and high-precision positioning control for labeling machines, packaging machines, printing machines and more applications
- Linear / arc interpolation motion control function
- Provides up to 16 external interrupt pointers

Complete Program Protection

- Auto backup function prevents program and data loss even when the battery runs out
- Secondary backup function saves an extra copy of programs and data to enhance program safety
- Up to 4 levels of password protection protects your source programs and intellectual property

Supports DVP-S Series modules (left-side and right-side); additional new Ethernet communication command (ETHRW)

Outstanding Operation Performance

- 32-bit CPU + ASIC dual processors support floating point operations
- Max. execution speed of basic instructions: 0.24 μ s

The DVP-24SV2 model has a built-in 2AI (12-bit) with Y10/Y12 of 10 kHz output.

| Built-in 4 Hardware High-Speed Counters | | | | | | | |
|---|-----------|-----------------------------|-----------|------------------|-----------|------------------|-----------|
| Standard | | Hardware high-speed counter | | | | | |
| 1-phase 1 input | | 1-phase 1 input | | 1-phase 2 inputs | | 2-phase 2 inputs | |
| Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth |
| 8 | 10 kHz | 4 | 200 kHz | 4 | 200 kHz | 4 | 200 kHz |

The X11 / X15 have been upgraded to 200kHz since 2016 October



Standard Slim PLC DVP-SS2

Economic and compact model

- ▶ 32-bit CPU for high-speed processing
- ▶ Max. I/O: 480 points
- ▶ Program capacity: 8k steps
- ▶ Data register: 5k words
- ▶ Max. execution speed of basic instructions: 0.35 µs
- ▶ Built-in RS-232 and RS-485 ports (Master/Slave)
- ▶ Supports standard Modbus ASCII/RTU protocol and PLC Link function

Motion Control Functions

- ▶ 4 points of 10 kHz pulse output
- ▶ 8 points of high-speed counters: 20 kHz/4 points, 10 kHz/4 points

Advanced Slim PLC DVP-SA2

Advanced model supporting 2-axis interpolation

- ▶ 32-bit CPU for high-speed processing
- ▶ Program capacity: 16 k steps
- ▶ Data register: 10 k words
- ▶ Max. execution speed of basic instructions: 0.35 µs
- ▶ Built-in 1 RS-232 and 2 RS-485 ports (Master/Slave)
 - ※ Note: RS-485 will be reduced to 1 port in DVP28SA2
- ▶ Supports standard Modbus ASCII/RTU protocol and PLC Link function
- ▶ No battery required; RTC function operates for 15 days after power off
- ▶ Supports DVP-S Series modules (left-side and right-side)
 - ※ Note: DVP28SA2 only supports right-side modules

Motion Control Functions

- ▶ 4 points of high-speed pulse output: 100 kHz/2 points, 10 kHz/2 points
- ▶ 8 points of high-speed pulse input: 100 kHz/2 points, 10 kHz/6 points, 1 set of A/B phase 50 kHz
- ▶ Supports 2-axis linear and arc interpolation

| Built-in High-Speed Counters | | | | | |
|------------------------------|-------------------|------------------|-----------|------------------|------------------|
| 1-phase 1 input | | 1-phase 2 inputs | | 2-phase 2 inputs | |
| Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth |
| 4/4 | 20 kHz/ 10 kHz | 2 | 20 kHz | 2/2 | 10 kHz/ 5 kHz |

| Built-in High-Speed Counters | | | | | |
|------------------------------|----------------|------------------|-----------|------------------|--------------|
| 1-phase 1 input | | 1-phase 2 inputs | | 2-phase 2 inputs | |
| Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth |
| 2/6 | 100 kHz/10 kHz | 2 | 100 kHz | 1/3 | 50 kHz/5 kHz |



Analog I/O Slim PLC DVP-SX2

Analog model with highly efficient PID control function

- ▶ 32-bit CPU for high-speed processing
- ▶ Program capacity: 16 k steps
- ▶ Data register: 10 k words
- ▶ Max. execution speed of basic instructions: 0.35 µs
- ▶ Built-in 4 analog inputs / 2 analog outputs
- ▶ Built-in mini USB, RS-232 and RS-485 ports (Master/Slave)
- ▶ Supports standard Modbus ASCII/RTU protocol and PLC Link function
- ▶ PID Auto Tuning function for highly efficient PID control
- ▶ No battery required; RTC function operates for at least one week after power off (hardware version 2.0 and above)
- ▶ Supports DVP-S Series modules (left-side and right-side)

Motion Control Functions

- ▶ 4 points of high-speed pulse output: 100 kHz / 2 points, 10 kHz / 2 points
- ▶ 8 points of high-speed pulse input: 100 kHz / 2 points, 10 kHz / 6 points
- ▶ Supports 2-axis linear and arc interpolation

Network Type Advanced Slim PLC DVP-SE

Complete network communication functions for advanced industrial applications

- ▶ 32-bit CPU for high-speed processing
- ▶ Program capacity: 16 k steps
- ▶ Data register: 12 k words
- ▶ Max. execution speed of basic instructions: 0.64 µs
- ▶ Built-in Ethernet
 - DVP12SE : Modbus & Ethernet/IP (Explicit message)
 - DVP26SE : Modbus & Ethernet/IP (Adapter mode, explicit message)
- ▶ Built-in mini USB port, RS-485 port*2 and Ethernet port that supports Modbus TCP and EtherNet/IP Slave (adapter)
 - * Note: RS-485 will be reduced to 1 port in DVP26SE
- ▶ IP Filter functions as firewall for first line protection against malware and network threats
- ▶ Supports DVP-S Series modules (left-side and right-side)
 - * Note: DVP26SE only supports right-side modules
- ▶ No battery required; RTC function operates for 15 days after power off

Motion Control Functions

- ▶ 4 points of high-speed pulse output: 100 kHz / 2 points, 10 kHz / 2 points
- ▶ 8 points of high-speed pulse input: 100 kHz / 2 points, 10 kHz / 6 points, 1 set of A / B phase 50 kHz
- ▶ Supports 2-axis linear and arc interpolation

| Built-in Analog I/O | | | |
|---------------------|----------------------------------|---------------|-------------------------------|
| Analog Input | | Analog Output | |
| Channels | 4 | Channels | 2 |
| Resolution | 12-bit | Resolution | 12-bit |
| Spec. | -20~20 mA or -10~10 V or 4~20 mA | Spec. | 0~20mA or -10V~10V or 4~20 mA |

| Built-in High-Speed Counters | | | | | |
|------------------------------|------------------|------------------|-----------|------------------|----------------|
| 1-phase 1 input | | 1-phase 2 inputs | | 2-phase 2 inputs | |
| Counters | Bandwidth | Counters | Bandwidth | Counters | Bandwidth |
| 2/6 | 100 kHz / 10 kHz | 2 | 100 kHz | 1/3 | 50 kHz / 5 kHz |

General Motion Controller

DVP-PM



Standard Motion Controller DVP10PM00M

Standard motion controller for general applications

- ▶ Built-in 24 I/O points. Max. 256 I/O points
- ▶ Program capacity: 64 k steps
- ▶ Data register: 10k words
- ▶ Execution speed LD: 0.13 µs, MOV: 2.1 µs
- ▶ Built-in RS-232 and RS-485 ports
- ▶ 2 / 3 / 4 / 5 / 6 axes linear interpolation motion control
- ▶ Highly accurate PWM 200 kHz output, resolution 0.3%
- ▶ 8 groups of high-speed captures (mark correction, frequency measurement), comparative output, Mark / Mask function (for bag making)
- ▶ Supports standard Modbus ASCII / RTU protocol

Motion Control Functions

- ▶ High-speed pulse output: built-in 6 sets of A/B phase pulse outputs
- ▶ 2 sets of 200 kHz output, 4 sets of 1 MHz output
- ▶ 6 sets of high-speed counters and hardware digital filter for counting
- ▶ Supports MPG inputs
- ▶ Single-axis motion control function (supports MPG, single-speed and two-speed positioning)
- ▶ Electronic gear function

Advanced Motion Controller DVP20PM00D / M / DT

Excellent as motion controllers or extension modules and supports advanced motion control functions

- ▶ Built-in 16 I/O points. Max. 512 I/O points
- ▶ Program capacity: 64 k steps
- ▶ Data register: 10k words
- ▶ Compatible with G-code / M-Code
- ▶ 3-axis linear/arc/helical interpolation
- ▶ Supports electronic cam (2,048 points) function for flying shear and rotary cut applications
- ▶ All models can be applied as motion controllers or extension modules
- ▶ Built-in RS-232 and RS-485 ports, and supports standard Modbus ASCII/RTU protocol

Motion Control Functions

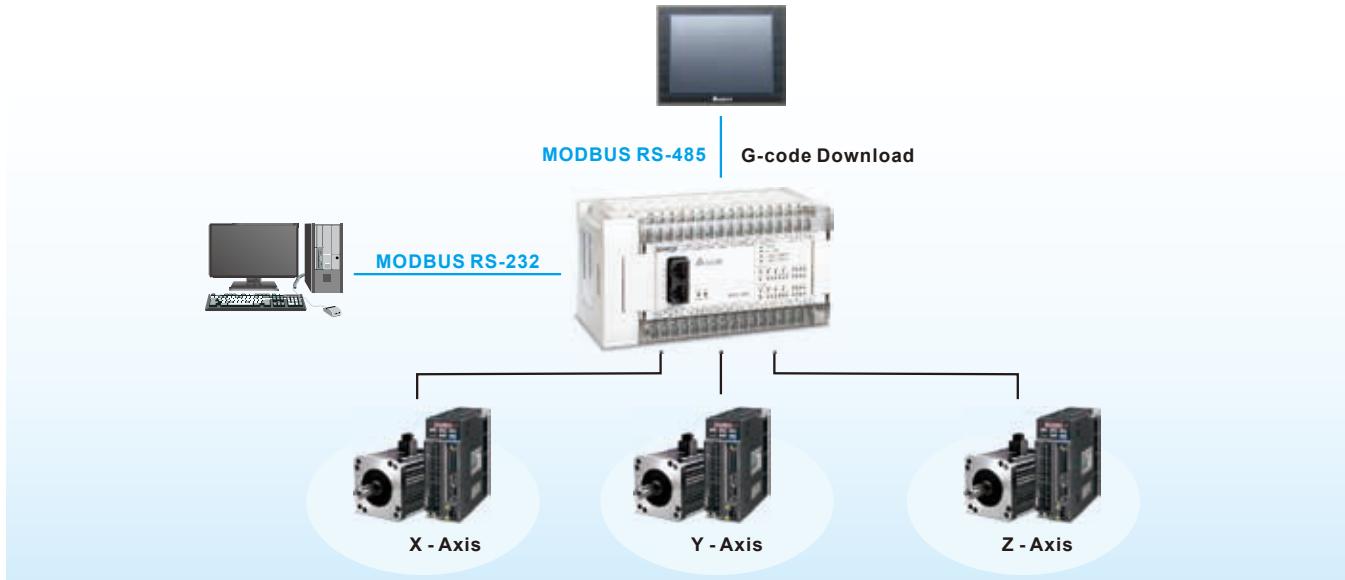
- ▶ Built-in A/B phase differential signal outputs: 2 sets (DVP20PM00D)/3 sets (DVP20PM00M)
Max. differential output frequency: 500 kHz
- ▶ Supports MPG inputs
- ▶ Single-axis motion control function (supports MPG, single-speed and two-speed positioning)
- ▶ Electronic gear function

Function Cards for DVP-PM

| Model Name | Specifications | Features |
|------------|-------------------------------------|--|
| DVP-FPMC | Ethernet/CANopen communication card | 1. Complies with CANopen CiA301 V4.0.2 protocol. 2. Provides high-speed program upload/download via Ethernet. |

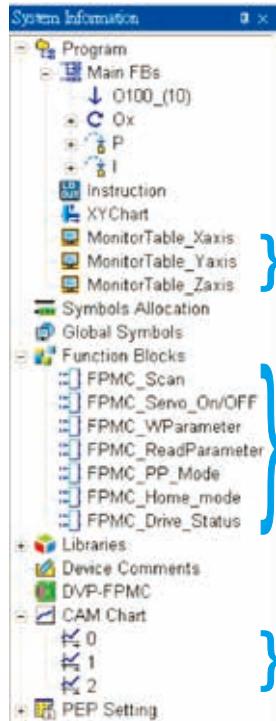
* DVP-PM also supports DVP-EH series function cards: DVP-F2AD, DVP-F2DA, DVP-F232S and DVP-F485S

General Motion Controller DVP-PM Series: Pulse-train communication



Programming Software for DVP-PM Series: PMSoft

The programming software for G-Code editing, motion path simulation, positioning route planning and electronic cam setup



Variable Declaration

Separate from the program. The corresponding physical I/O point of the variable is defined only after the program is compiled. Users do not need to modify the program.

Function Block

- A completed project can be divided into many function blocks.
- Every function block can be used repeatedly, and the import / export function makes the programming more convenient.

Comprehensive Monitoring

The "program monitoring" and "device monitoring" allow users to keep track of program operation.

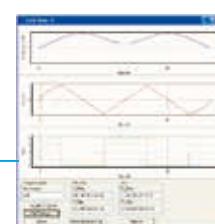
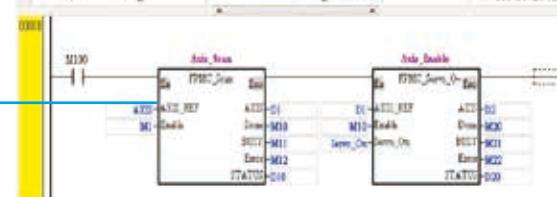
Motion Network Function Block

PLCopen Function Block allows users to easily use motion control functions

Electronic Cam

Electronic cam editing

| Local Symbols | | | | | |
|---------------|-------------|------------------|---------|---------------|--|
| Class | Identifier | Type | Initial | Comment | |
| VAR | Axis_Eman | FPMC_Beam | | FPMC對ASD-A2門檻 | |
| VAR | Axis_Enable | FPMC_Sane_OnOff | | FPMC對ASD-A2介接 | |
| VAR | Axis_WP | FPMC_WPparameter | | FPMC對脈衝寫入E | |
| VAR | Axis_SF | FPMC_StepIncr | | FPMC對脈衝內插E | |



Multi-axis Motion Controller

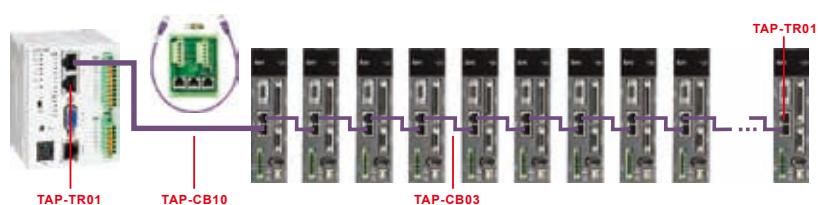
DVP-MC

16-axis Motion Controller

DVP10MC11T

Perfect controller to offer highly stable multi-axis motion control solutions through CANopen communication

- ▶ Built-in 12 I/O points
(8 sets of high-speed inputs,
4 sets of high-speed outputs)
- ▶ Up to 16 axes synchronous control through
CANopen communication
- ▶ Synchronization time: 4 axes in 2ms / 8 axes in 4ms
- ▶ Built-in motion control instructions of electronic cam,
flying shear, rotary cut for easy operation
- ▶ High precision control with interpolation function



System Control Architecture

Extensions (left-side)

- Supports DVP-S Series modules (left-side):
 - CANopen master
 - DeviceNet master
 - PROFIBUS slave
 - load cell modules

Built-in Functions

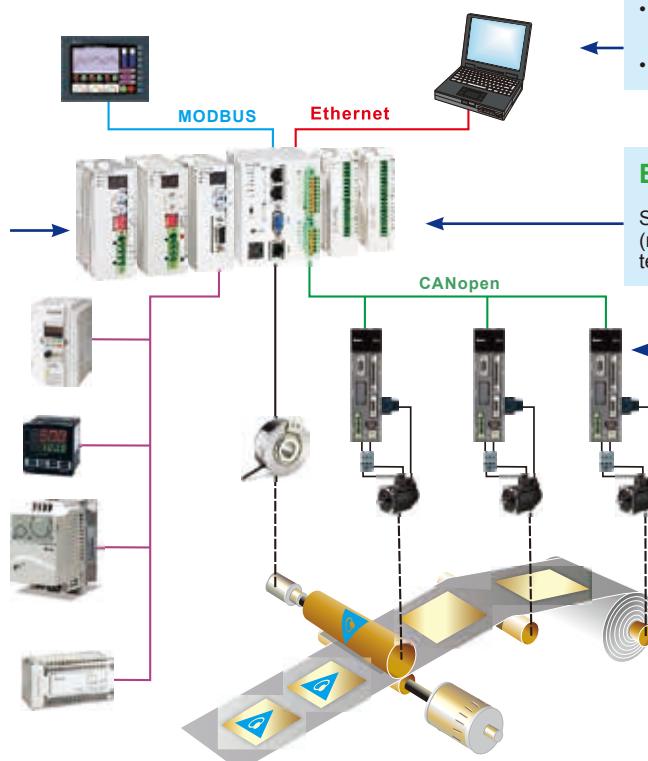
- Built-in Ethernet, RS-232 and RS-485 communication ports
- Built-in CANopen and encoder interface

Extensions (right-side)

Supports DVP-S Series modules (right-side): digital, analog and temperature modules

Accessories

Standard CANopen communication cables,
terminal resistor
and distribution box



Motion Control

- Speed, position, torque control
- Supports Electronic gear, E-Cam (2,048 points), flying shear and rotary cut applications
- Compatible with G-code, 3 axes arc/helical interpolation, 8 axes linear interpolation
- High speed position capture and error compensation

CANopen Accessories

| Model Name | Specifications | Features |
|------------------|------------------------------|--|
| UC-CMCXXX-01A | CANopen sub-line | RJ45 connector for both ends |
| UC-DN01Z-01A/02A | CANopen main-line / sub-line | AWG18/AWG24 CANopen cables for long distance communication via CANopen |
| TAP-CN01/02/03 | Distribution box | Built-in terminal resistor 120Ω |
| TAP-TR01 | Terminal resistor | Terminal resistor 120Ω |

6 and 24-axis Motion Controller

DVP15MC / DVP50MC New

The DVP15MC/DVP50MC Series is a multi-axis motion controller designed for the CANopen / EtherCAT network architecture. It supports CANopen/EtherCAT with built-in motion control instructions (BufferMode and Jerk) for flexible configuration and fast project development. DVP15MC/DVP50MC controls up to 24 real axes via Motion port. It also supports single axis motion control instructions such as speed, position, torque, homing, position setup and multi-axis motion control instructions such as electronic gear, electronic cam (E-Cam), rotatory cut and G-code.

DVP15MC/DVP50MC features multiple built-in communication interfaces, and can be easily connected to other equipment without additional communication modules. It also provides high-speed and reliable motion control via CANopen/EtherCAT for printing, packaging, wire cutting, robots and other automation control industries.

Motion Control

- Up to 24 real axes control
(virtual axis no.: 1 ~ 32, can't be repetitive with real axis no.)
- Built-in motion control instructions and easy to use
- Supports encoder axis and virtual axis
- Single axis motion control instructions: speed, torque, homing, and position setup
- Application instructions: electronic gear, E-Cam, and rotary cut
- G-code: 8 axes linear/arc/helical interpolation
- Coordinates motion control instructions

Performance

- 1 GHZ high-speed floating point operation
- High-precision computing: supports LREAL (Double-precision floating-point format)
- Synchronization time:
 - DVP15MC: 4 axes in 2ms, 8 axes in 4ms
 - DVP50MC: 32 axes in 1ms
- Program capacity: 20 MB
- Data capacity: 20 MB

External Interfaces

- 1 CANopen port as host or slave station
- 1 Motion port (DVP15MC: CANopen, DVP50MC: EtherCAT)
- 16 high-speed inputs/8 high-speed outputs
- 2 incremental encoder interfaces
- 1 SSI absolute encoder interface
- Ethernet port: DVP15MC x2, DVP50MC x1
- 1 SD card slot
- 1 RS-232 port and 1 RS-485 port
- Extension:
 - Left-side: supports up to 8 DVP-S Series modules (master/slave/load cell modules)
 - Right-side: compatible with DVP-S Series modules (240 DI, 240 DO and 8 special modules)

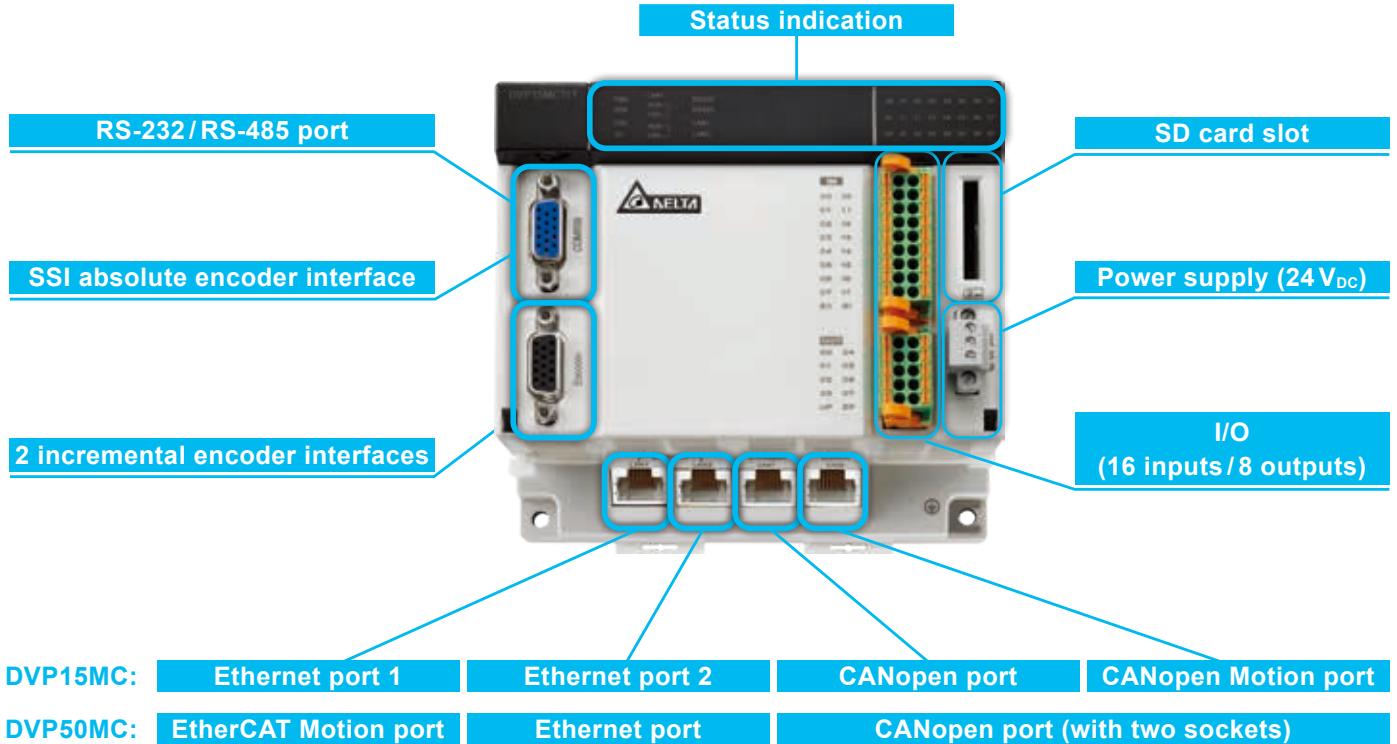


Motion Network and Wiring

- DVP15MC
 - Motion network: CANopen
 - Communication speed: Max. 1Mbps
 - Distance: Max. 100m (at 500 kbps)
- DVP50MC
 - Motion network: EtherCAT
 - Communication speed: Max. 100Mbps
 - Distance: Max. 50m (Node-to-node)
- Simple wiring, plug-and-play

DVP15MC / DVP50MC Interface

Multiple built-in communication interfaces allow easy connection to other equipment without additional communication modules.

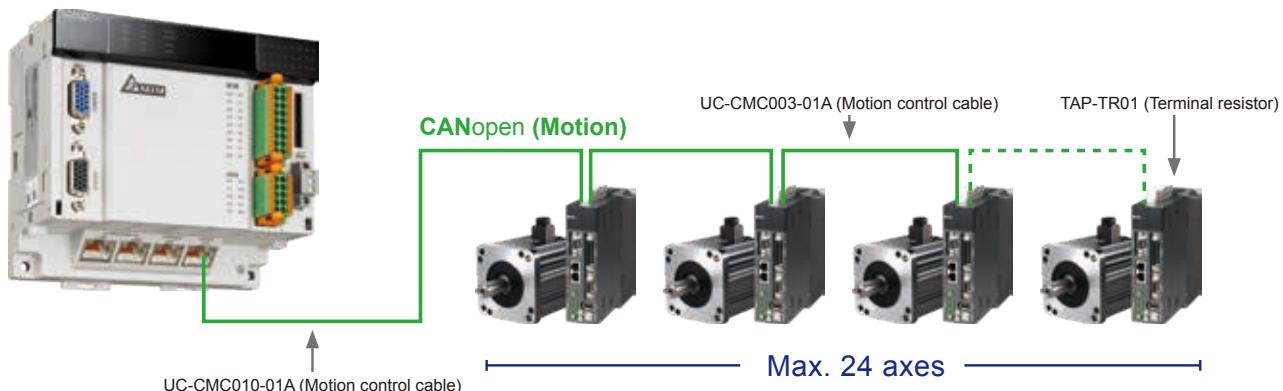


Simple Wiring, Plug-and-Play Motion Control Network

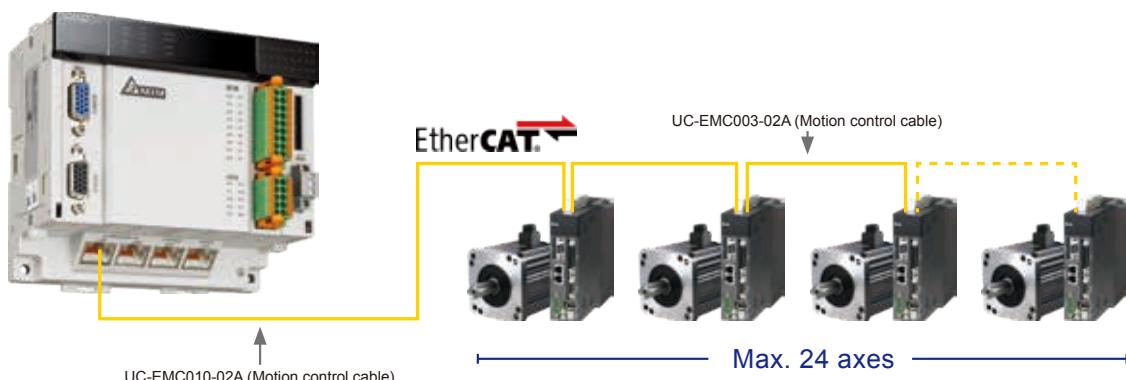
The DVP15MC/DVP50MC features stable CANopen / EtherCAT communication, simple wiring, plug-and-play functions, and communicates with servo drives (axes) via CANopen/EtherCAT network. Delta provides communication cable, terminal resistor and distribution box.

*Please refer to "Accessories" for detail information.

DVP15MC:



DVP50MC:



Compatible with Servo Drives via Motion Port

- Delta's AC Motor Drives ASDA-A2-XXXX*-M models support CANopen communication, and they are the only models that can be connected to a DVP15MC CANopen (Motion) port and DVP10MC11T for motion control networks.
- Delta's AC Motor Drives ASDA-A2-XXXX*-E models support EtherCAT communication, and they are the only models that can be connected to a DVP50MC EtherCAT (Motion) port for motion control networks.

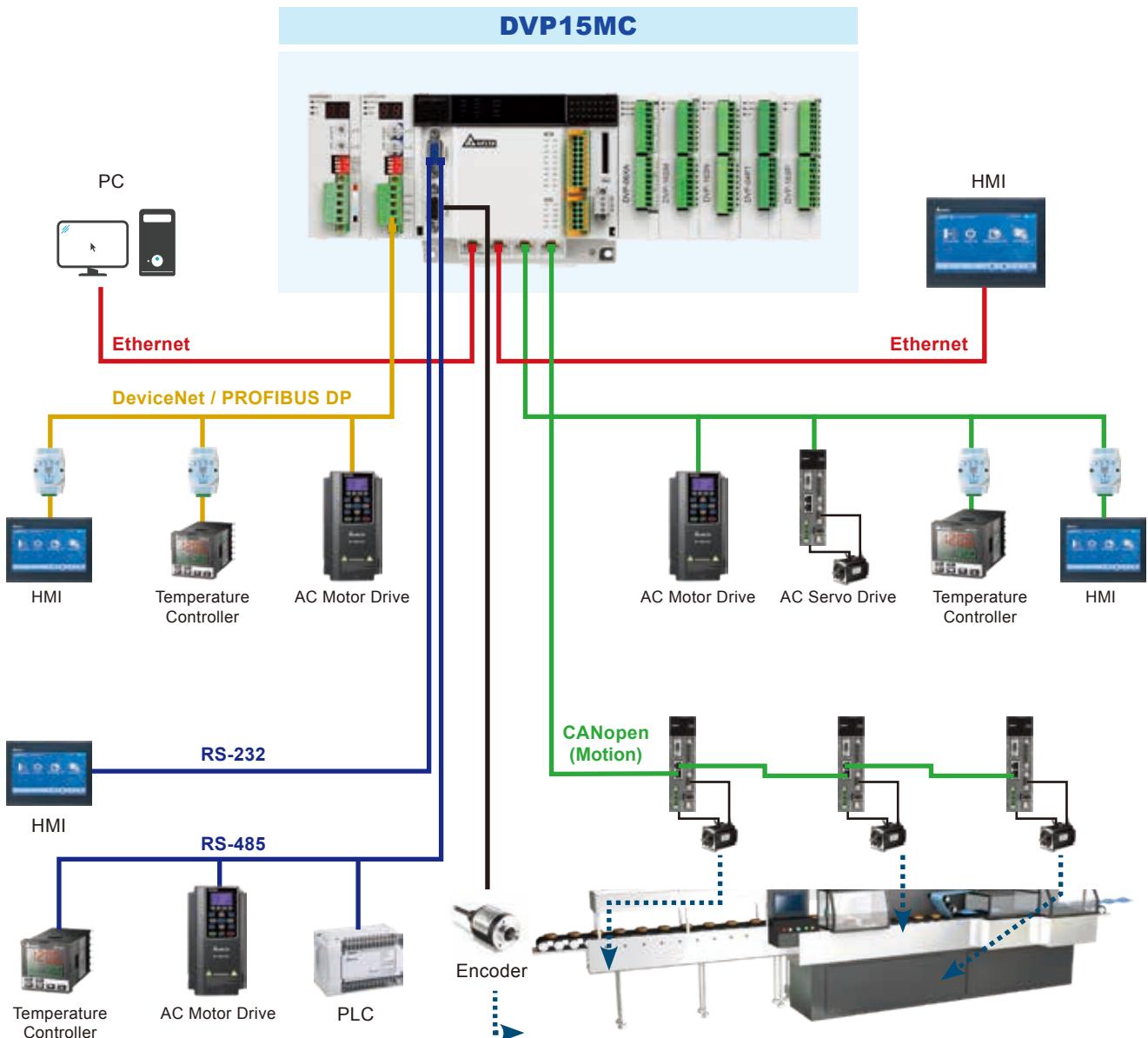
The standard CANopen port of DVP15MC / DVP50MC can be connected to all equipment that supports CANopen networks. The ASDA-A2 Series models provide high positioning accuracy and low-speed operation stability when matched with ECMA Series servo motors with high-precision encoder (20-bit resolution and 1,280,000 pulse/rev).

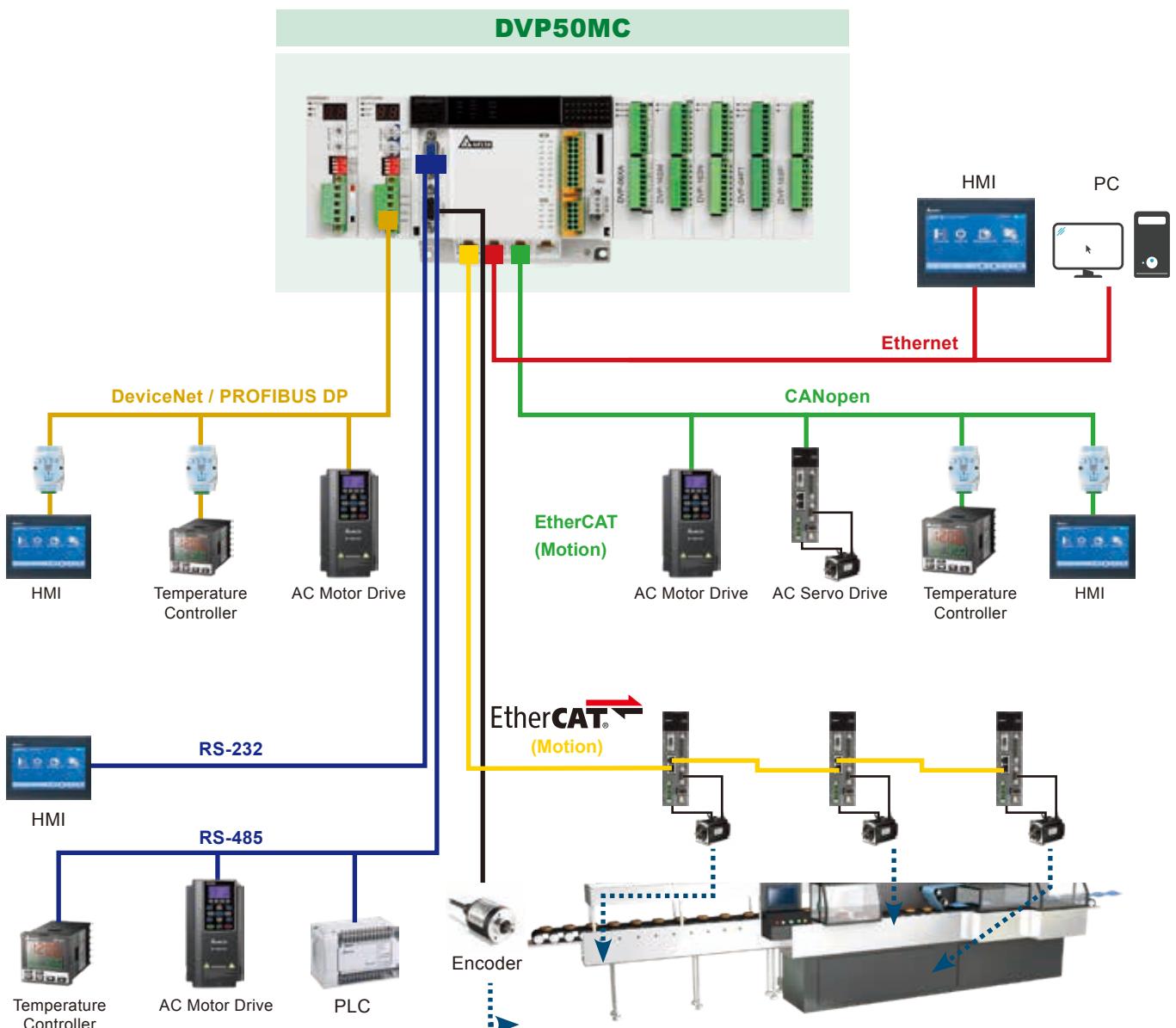
* XXXX represents output power and input voltage.



System Structure

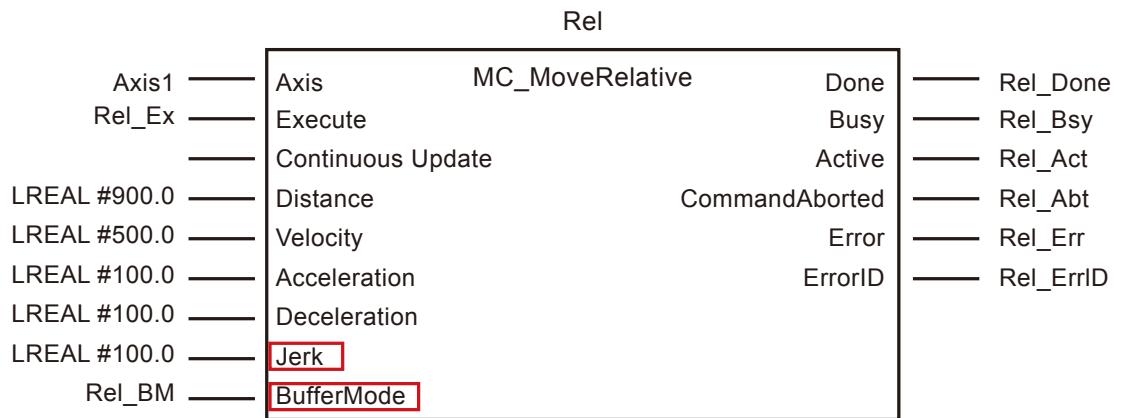
DVP15MC/DVP50MC provides multiple industrial networks. As in the structure shown below, DVP15MC/DVP50MC can be connected to a variety of industrial automation equipment via Ethernet (upper layer), EtherCAT, CANopen, DeviceNet, PROFIBUS DP (middle layer) and RS-485 (lower layer, support Modbus).



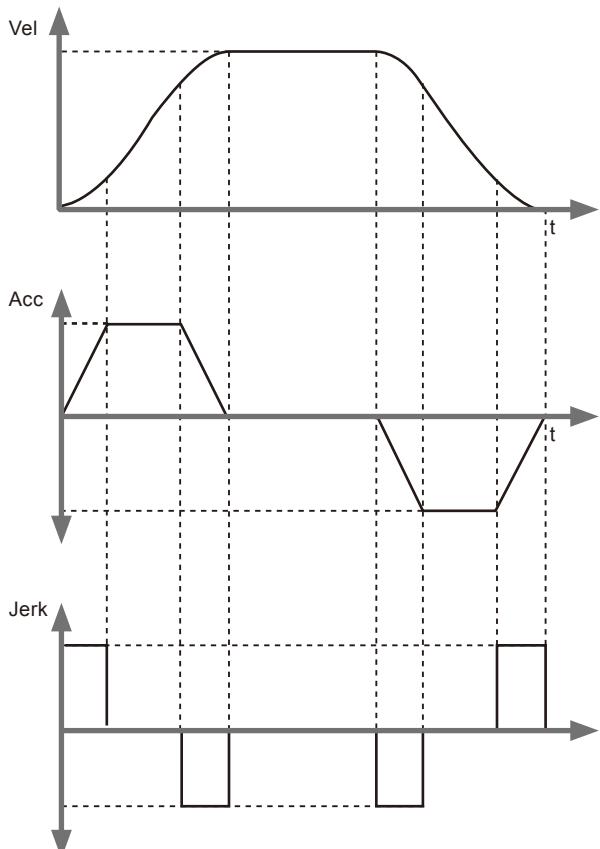


Motion Control

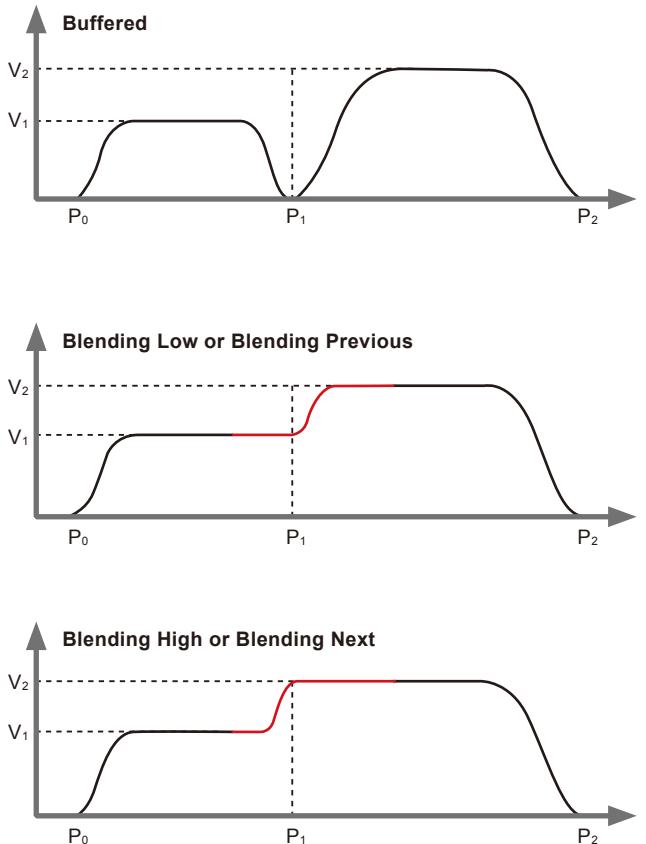
Supports BufferMode and Jerk motion instructions:



Supports Jerk motion instruction: modify the Jerk value to make the velocity curve smoother



Supports BufferMode motion instruction: enables smooth transition between 2 instructions



CANopen Configuration Software: CANopen Builder

- Features network arrangement, motion control programming, G-code editor / graph preview and E-Cam curve planning
- Supports international standard function blocks for motion control, enhancing program editing efficiency

The screenshot shows the CANopen Builder software interface with several windows and toolbars. On the left, there's a tree view of the project structure. In the center, there are four main panes: 1) A network configuration window showing nodes like 'DVP-MC' and 'DVP-PM'. 2) A motion control block diagram with function blocks like 'MC_Circle' and 'MC_Offset'. 3) A G-code editor window displaying a circular path. 4) An E-Cam curve planning window showing a graph of a cam profile. Arrows point from four callout boxes on the left to these specific windows.

- Network Arrangement**
Network scanning for listing all the equipment
- Motion Control**
Supports international standard function blocks for motion control
- G-code Editor and Preview**
G-code editing and preview, direct DXF files import available
- Program Editing**
CFC, LD, ST, function blocks connection and syntax check
- E-Cam Curve Planning**
Allows users to plan E-Cam curves according to their needs for more complex control

Professional Motion Control Applications

Designed as the most outstanding and economical motion controller, the DVP-PM Series provides flying shear, rotary cut, electronic cam and many advanced functions to achieve highly precise motion control

Robot Arm

Electronic Cam (E-Cam) function enables the robot arm to perform multi-axis control. After the required positions are memorized in the PLC, users can enable the electronic cam function to create the E-Cam profile and conduct trajectory tracking and multi-axes motion control required in robot arm applications.



High-Speed Cutting Machine

Average PLC cutting motion is limited by operation speed, poor synchronization, large amounts of calculations and long CPU processing time, resulting in a disproportionate cutting result and affecting the quality of end products. The basic demands, however, can be fulfilled under low speed while rough surface and low quality appear under high speed. The electronic cam function offered by DVP-PM and DVP-MC is able to generate dynamic cam curves for rotary cutting to ensure precise cutting results.



Digital Board Cutting Machine

The DVP-PM Series' built-in flying shear function is able to complete synchronous conveyance and cutting speed, and ensures precise cutting results on conveyor belts.



CNC Lathe

The DVP-PM Series controls multi-axis motion. Two axes complete the motion by linear or arc interpolation, and the other two work independently, controlling the independent or synchronous ascending/descending of the vertical axis on two sides.



High Performance PLC DVP-EH Series and Extension Modules

Small PLC with Highest Operation Efficiency

DVP-EH3

- Max. 512 I/O points
- 200 kHz high-speed pulse output
- High-speed extension modules
- Linear/Arc interpolation
- L type, supports extension modules (left-side)



Function Cards

■ RS-232/RS-422/RS-485 Communication (COM3 Port, DVP-EH3 series PLC only)

DVP-F232



DVP-F422



DVP-F485



■ Ethernet Communication

DVP-FEN01 (DVP-EH3 only)



■ Analog I/O

DVP-F2AD

DVP-F2DA



Accessories

■ Data Backup Card

DVP-512FM (DVP-EH3 only)



DVPPCC01
(for general applications)



■ Data Transmission Cable

UC-MS030-01A



| Model Name | Specifications |
|------------------------------|---|
| DVP16EH00R3 | 2 counters of 200 kHz input |
| DVP16EH00T3 | 2 counters of 200 kHz input, 2 axes of 200 kHz output |
| DVP20EH00R3 | 2 counters of 200 kHz input, 1 counter of 20 kHz input |
| DVP20EH00T3 | 2 counters of 200 kHz input, 2 axes of 200 kHz output |
| DVP32EH00R3 | 4 counters of 200 kHz input |
| DVP32EH00T3 ² | 4 counters of 200 kHz input, 4 axes of 200 kHz output |
| DVP32EH00M3 | 4 counters of 200 kHz input (Differential: 2 sets), 2 axes of 200 kHz output (Differential: 2 axes) |
| DVP32EH00MT | 4 counters of 200 kHz input (Differential: 2 sets), 2 axes of 200 kHz output (Differential: 2 axes) |
| DVP32EH00R3-L ¹ | 4 counters of 200 kHz input |
| DVP32EH00T3-L ^{1,2} | 4 counters of 200 kHz input, 4 axes of 200 kHz output |
| DVP40EH00R3 | 4 counters of 200 kHz input |
| DVP40EH00T3 | 4 counters of 200 kHz input, 4 axes of 200 kHz output |
| DVP48EH00R3 | 4 counters of 200 kHz input |
| DVP48EH00T3 | 4 counters of 200 kHz input, 4 axes of 200 kHz output |
| DVP64EH00R3 | 4 counters of 200 kHz input |
| DVP64EH00T3 | 4 counters of 200 kHz input, 4 axes of 200 kHz output |
| DVP80EH00R3 | 4 counters of 200 kHz input |
| DVP80EH00T3 | 4 counters of 200 kHz input, 4 axes of 200 kHz output |

—AC— AC power supply

Inputs

Outputs

Relay output

Transistor output

Differential output

*1 Supports high-speed extension (left-side).

*2 DVP32EH Series produced after 2014 support 4 axes of 200 kHz output

Digital I/O Modules

Input Point Extension

- DVP08HM11N
- DVP16HM11N
- DVP32HM11N



Output Point Extension

- DVP08HN11R/T
- DVP32HN00R/T



Input/Output Point Extension

- DVP08HP11R/T
- DVP16HP11R/T
- DVP32HP00R/T
- DVP48HP00R/T



Analog I/O Modules

Analog Function Extension

Analog Input

- DVP04AD-H2
V: 14-bit
I: 13-bit
- DVP04AD-H3
V: 16-bit
I: 16-bit



Analog Output

- DVP04DA-H2
V: 12-bit
I: 12-bit
- DVP04DA-H3
V: 16-bit
I: 16-bit



Analog Input/Output

- DVP06XA-H2
Input 4CH/Output 2CH
V: 12-bit/V : 12-bit
I: 11-bit/I : 12-bit
- DVP06XA-H3
V: 16-bit
I: 16-bit



Temperature Measurement

Sensor: Pt100

- DVP04PT-H2



Sensor:

- DVP04TC-H2
J, K, R, S, E, N, T
thermocouple
0 ~ 150mV
- DVP08TC-H2
J, K, R, S, E, N, T
thermocouple
±150mV



DVP32EH00R3-L & DVP32EH00T3-L: compatible with DVP-SV Series' high-speed extension modules (left-side)

Motion Control

Single-Axis Positioning

- DVP01PU-H2



High-Speed Counter

- DVP01HC-H2



Standard PLC DVP-ES3 / ES2 / EX2 Series

and Extension Modules

The Most Profitable Solution for Sequential Control



reddot design award
winner 2010

DVP-ES3 / ES2

| Model Name | Specifications |
|--------------------------------|---|
| DVP16ES200R | 8 Inputs, 8 Outputs, 1 Relay Output, Ethernet |
| DVP16ES200T | 8 Inputs, 8 Outputs, Transistor Output, Ethernet |
| DVP20ES200RE | 12 Inputs, 8 Outputs, 1 Relay Output, Ethernet |
| DVP20ES200TE | 12 Inputs, 8 Outputs, Transistor Output, Ethernet |
| DVP24ES200R | 6 Inputs, 8 Outputs, 1 Relay Output, Ethernet |
| DVP24ES200T | 16 Inputs, 8 Outputs, Transistor Output, Ethernet |
| DVP32ES200R | 16 Inputs, 16 Outputs, 1 Relay Output, Ethernet |
| DVP32ES200T | 16 Inputs, 16 Outputs, Transistor Output, Ethernet |
| DVP32ES211T | 16 Inputs, 16 Outputs, Transistor Output, CANopen |
| DVP32ES200RC | 16 Inputs, 16 Outputs, 1 Relay Output, CANopen |
| DVP32ES200TC | 16 Inputs, 16 Outputs, Transistor Output, CANopen |
| DVP32ES200RE | 16 Inputs, 16 Outputs, 1 Relay Output, Ethernet |
| DVP32ES200TE | 16 Inputs, 16 Outputs, Transistor Output, Ethernet |
| DVP32ES311T <small>New</small> | 16 Inputs, 16 Outputs, Transistor Output, CANopen, Ethernet |
| DVP40ES200R | 24 Inputs, 16 Outputs, 1 Relay Output, Ethernet |
| DVP40ES200T | 24 Inputs, 16 Outputs, Transistor Output, Ethernet |
| DVP40ES200RE | 24 Inputs, 16 Outputs, 1 Relay Output, Ethernet |
| DVP40ES200TE | 24 Inputs, 16 Outputs, Transistor Output, Ethernet |
| DVP60ES200R | 36 Inputs, 24 Outputs, 1 Relay Output, Ethernet |
| DVP60ES200T | 36 Inputs, 24 Outputs, Transistor Output, Ethernet |
| DVP60ES200RE | 36 Inputs, 24 Outputs, 1 Relay Output, Ethernet |
| DVP60ES200TE | 36 Inputs, 24 Outputs, Transistor Output, Ethernet |
| DVP80ES200R | 40 Inputs, 40 Outputs, 1 Relay Output, Ethernet |
| DVP80ES200T | 40 Inputs, 40 Outputs, Transistor Output, Ethernet |

⊖ AC power supply ↶ Inputs ↑ Outputs → Transistor output → Relay output Ethernet
⎓ DC power supply ↑ Outputs → Relay output CANopen



Digital I/O Modules

- Input Point Extension

DVP08XM211N
DVP16XM211N

- Output Point Extension

DVP08XN211R/T
DVP16XN211R/T
DVP24XN200R/T

- Input/Output Point Extension

DVP08XP211R/T
DVP16XP211R/T
DVP24XP200R/T
DVP32XP200R/T



Analog I/O Modules

- Input Point Extension

DVP04AD-E2

- Output Point Extension

DVP04DA-E2
DVP02DA-E2

- Input/Output Point Extension

DVP06XA-E2



Temperature Measurement Modules

DVP04PT-E2

DVP06PT-E2

DVP04TC-E2



Resolver Modules

DVP10RC-E2¹



DVP-EX2

| Model Name | Specifications |
|-------------|---|
| DVP20EX200R | 8 Inputs, 6 Outputs, 1 Relay Output, 4AI/2AO |
| DVP20EX200T | 8 Inputs, 6 Outputs, Transistor Output, 4AI/2AO |
| DVP30EX200R | 16 Inputs, 10 Outputs, 1 Relay Output, 3AI/1AO |
| DVP30EX200T | 16 Inputs, 10 Outputs, Transistor Output, 3AI/1AO |

⊖ AC power supply ↶ Inputs ↑ Outputs → Transistor output
⎓ DC power supply ↑ Outputs → Relay output

DVP-ES2 Series Extension Cable Modules

DVPAEXT01-E2



¹*1. Contact your sales representative for the official launch date of the DVP10RC-E2 module.

Slim PLC DVP-S Series

Compact, Flexible Extension

DVP-SS2

Standard Slim PLC



| Model Name | Specifications | | | |
|--------------------------------|----------------|----|----|----|
| DVP28SS211R | -DC- | 16 | 12 | R→ |
| DVP28SS211T | -DC- | 16 | 12 | T→ |
| DVP28SS211S <small>New</small> | -DC- | 16 | 12 | T→ |
| DVP14SS211R | -DC- | 8 | 6 | R→ |
| DVP14SS211T | -DC- | 8 | 6 | T→ |
| DVP12SS211S | -DC- | 8 | 4 | S→ |

-DC- DC power supply ↗ Inputs ↑ Outputs
 (T→) Transistor output (NPN) (R→) Relay output
 (S→) Transistor output (PNP)

DVP-SX2

Analog I/O Slim PLC



| Model Name | Specifications | | | |
|-------------|----------------|---|---|------------|
| DVP20SX211R | -DC- | 8 | 6 | R→ 4AI/2AO |
| DVP20SX211T | -DC- | 8 | 6 | T→ 4AI/2AO |
| DVP20SX211S | -DC- | 8 | 6 | S→ 4AI/2AO |

-DC- DC power supply ↗ Inputs ↑ Outputs
 (T→) Transistor output (NPN) (R→) Relay output
 (S→) Transistor output (PNP)

DVP-SA2

Advanced Slim PLC



| Model Name | Specifications | | | |
|--------------------------------|----------------|----|----|----|
| DVP28SA211R ^{*1} | -DC- | 16 | 12 | R→ |
| DVP28SA211T ^{*1} | -DC- | 16 | 12 | T→ |
| DVP28SA211S <small>New</small> | -DC- | 16 | 12 | T→ |
| DVP12SA211R | -DC- | 8 | 4 | R→ |
| DVP12SA211T | -DC- | 8 | 4 | T→ |

*1 The models do not support left-side modules.

-DC- DC power supply ↗ Inputs ↑ Outputs
 (T→) Transistor output (NPN) (R→) Relay output

DVP-SV2

High Performance Slim PLC



| Model Name | Specifications | | | |
|-------------|----------------|----|----|--------|
| DVP28SV11R2 | -DC- | 16 | 12 | R→ |
| DVP28SV11T2 | -DC- | 16 | 12 | T→ |
| DVP28SV11S2 | -DC- | 16 | 12 | S→ |
| DVP24SV11T2 | -DC- | 10 | 12 | T→ 2AI |

-DC- DC power supply ↗ Inputs ↑ Outputs
 (T→) Transistor output (NPN) (R→) Relay output
 (S→) Transistor output (PNP)

DVP-SE

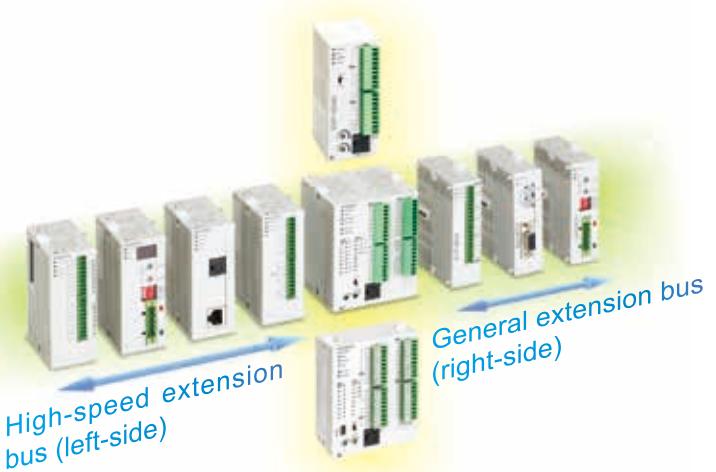
Network Type Advanced Slim PLC



| Model Name | Specifications | | | |
|-------------------------------|----------------|----|----|----|
| DVP26SE11R ^{*1} | -DC- | 14 | 12 | R→ |
| DVP26SE11T ^{*1} | -DC- | 14 | 12 | T→ |
| DVP26SE11S <small>New</small> | -DC- | 14 | 12 | T→ |
| DVP12SE11R | -DC- | 8 | 4 | R→ |
| DVP12SE11T | -DC- | 8 | 4 | T→ |

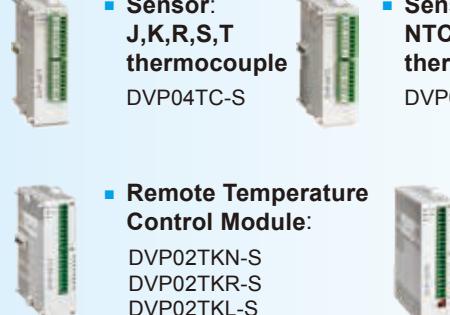
*1 The models do not support left-side modules.

-DC- DC power supply ↗ Inputs ↑ Outputs
 (T→) Transistor output (NPN) (R→) Relay output



Slim PLC DVP-S Series

Extension Modules

| High-speed Extension Modules (left-side) ^{*1} | General Extension Modules (right-side) ^{*2} | | |
|--|--|---|---|
| Network Modules | I/O Point Extension | Input/Output Point Extension | Digital Switch |
| <ul style="list-style-type: none"> ■ DeviceNet Master DVPDNET-SL ■ CANopen Master DVPCOPM-SL ■ Ethernet DVPEN01-SL ■ PROFIBUS-DP Slave DVPPF02-SL ■ RS-422/RS-485 Serial Communication Module DVPSCM12-SL ■ BACnet MS/TP Slave Serial Communication Module |  <ul style="list-style-type: none"> ■ Input Point Extension DVP08SM11N DVP16SM11N ■ Pin Header Input DVP32SM11N    | <ul style="list-style-type: none"> ■ Output Point Extension DVP06SN11R DVP08SN11R/T DVP08SN11TS DVP16SN11T DVP16SN11TS ■ Pin Header Output DVP32SN11TN    | |
| Analog Extension | Analog Extension | Analog Input/Output | |
| <ul style="list-style-type: none"> ■ Analog Input DVP04AD-SL ■ Analog Output DVP04DA-SL | <ul style="list-style-type: none"> ■ Analog Input DVP04AD-S DVP06AD-S DVP04AD-S2  | <ul style="list-style-type: none"> ■ Analog Output DVP04DA-S DVP02DA-S DVP04DA-S2  | |
| Load Cell/Tension | Temperature Measurement | Sensor: NTC thermocouple | |
| <ul style="list-style-type: none"> ■ Load Cell Module <p>DVP01LC-SL DVP02LC-SL DVP201LC-SL DVP211LC-SL DVP202LC-SL</p> | <ul style="list-style-type: none"> ■ Sensor: Pt100, Pt1000 DVP04PT-S DVP06PT-S ■ Temperature Control: DVP02TUN-S DVP02TUR-S DVP02TUL-S  | <ul style="list-style-type: none"> ■ Sensor: J,K,R,S,T thermocouple DVP04TC-S ■ Remote Temperature Control Module: DVP02TKN-S DVP02TKR-S DVP02TKL-S  | |
| | Communication Modules | Power Supply Modules | Axis Control Module |
| | <ul style="list-style-type: none"> ■ PROFIBUS Slave DVPPF01-S ■ DeviceNet Slave DVPDT01-S  | <p>DVPPS01 DVPPS02 DVPPS05</p>  | <ul style="list-style-type: none"> ■ Single-Axis Positioning DVP01PU-S  |

*1. DVP32EH00R3-L & DVP32EH00T3-L are also compatible with the left-side high-speed extension modules.

*2. Max. quantity of right-side extension module is 14, among which the quantity of -S and -S2 modules must be equal to or less than 8. If the total quantity of extension modules is over 14, applying high density extension modules is recommended.

Specifications

Electrical Specifications

| | AC | DC |
|---------------------------------|--|--|
| Power Supply Voltage | 100~240 V _{AC} (-15%~10%), 50/60Hz ±5% | 24 V _{DC} (-15%~20%) |
| Fuse Capacity | 2A/250 V _{AC} | ES: 2A/250 V _{AC} ; SV: 2.5A/30 V _{DC} |
| Spike Voltage Durability | 1500 V _{AC} (Primary-secondary); 1500 V _{AC} (Primary-PE); 500 V _{AC} (Secondary-PE) | |
| Insulation Impedance | > 5 MΩ (all I/O point-to-ground: 500 V _{DC}) | |
| Noise Immunity | ESD: 8 kV Air Discharge EFT: Power Line, 2 kV Digital I/O: 1 kV Analog & Communication I/O: 1 kV RS: 26 MHz~1 GHz, 10 V/m | |
| Earth | The diameter of grounding wire shall not be shorter than that of the power supply cable. (When many PLCs are in use at the same time, please make sure every PLC is properly grounded.) | |
| Storage/Operation | Storage: -25°C~70°C (temperature); 5%~95% (humidity) Operation: 0°C~55°C (temperature); 5%~95% (humidity); pollution degree 2 | |

Input Specifications^{*1}

| Max. Input Frequency | 10 kHz | 20 kHz | 100 kHz | 200 kHz |
|-----------------------------------|--------------------------------|---|---|---|
| Input Signal Type | NPN (Sink)/PNP (Source) | | | |
| Input Signal Voltage | 24 V _{DC} ±10% (5 mA) | | | |
| Response time^{*2} | OFF→ON: 20 µs ON→OFF: 50 µs | ES/EX/SX/SS2/SX2 OFF→ON: 3.5 µs ON→OFF: 20 µs | ES2/EX2/SA2/SX2 OFF ON: 2.5 µs ON→OFF: 5 µs | ES3/EH3/SV2/PM OFF→ON: 0.15 µs ON→OFF: 3 µs |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

*1. For more detailed specifications, see the "Specification" section in the instruction sheet of each model.

*2. When the input point on PLC conducts only general input functions, use D1020 or D1021 to adjust the response time (default: 10ms).

Output Specifications^{*1}

| | Relay-R | Transistor-T | | |
|--|---|--------------------------------|---|---|
| | | General-speed | High-speed | |
| Max. Exchange (working) Frequency | 1Hz ^{*2} | 10 kHz | 100 kHz | 200 kHz |
| Current spec. | 2A/1 Point | 0.3A/point @40°C | SA2/SX2/ES2/EX2/SE Resistive: 0.5A/point (4A/COM) | ES3/EH3/SV2/PM Resistive: 0.5A/point (4A/COM) |
| | | | Conductive: 12 W (24 V _{DC}) Light bulb: 2 W (24 V _{DC}) | Conductive: 12 W (24 V _{DC}) Light bulb: 2 W (24 V _{DC}) |
| | | | | |
| | | | | |
| Voltage Spec. | 250 V _{AC} /30 V _{DC} | | 30 V _{DC} | |
| Response Time | 10 ms | OFF→ON: 20 µs ON→OFF: 30 µs | OFF→ON: 2 µs ON→OFF: 3 µs | OFF→ON: 0.5 µs ON→OFF: 2.5 µs |

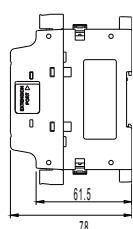
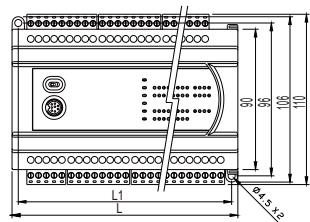
*1. For more detailed specifications, see the "Specification" section in the instruction sheet of each model.

*2. Relay life: Resistive load more than 200,000 times; conductive load more than 80,000 times.

Dimensions (unit: mm)

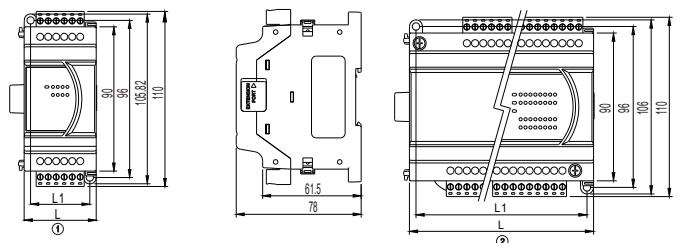
DVP-ES3/ES2/EX2 Series

| Model Name (mm) | L | L1 |
|-----------------|-----|-----|
| DVP16ES200R/T | 105 | 97 |
| DVP20ES200RE | 125 | 117 |
| DVP20ES200TE | 125 | 117 |
| DVP24ES200R/T | 125 | 117 |
| DVP32ES200R/T | 145 | 137 |
| DVP32ES200RC | 145 | 137 |
| DVP32ES200TC | 145 | 137 |
| DVP32ES200RE | 165 | 157 |
| DVP32ES200TE | 165 | 157 |
| DVP32ES211T | 145 | 137 |
| DVP40ES200R/T | 165 | 157 |
| DVP40ES200RE | 194 | 186 |
| DVP40ES200TE | 194 | 186 |
| DVP60ES200R/T | 225 | 217 |
| DVP60ES200RE | 255 | 247 |
| DVP60ES200TE | 255 | 247 |
| DVP80ES200R/T | 302 | 294 |
| DVP20EX200R/T | 145 | 137 |
| DVP30EX200R/T | 165 | 157 |
| DVP32ES311T New | 165 | 157 |



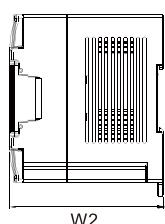
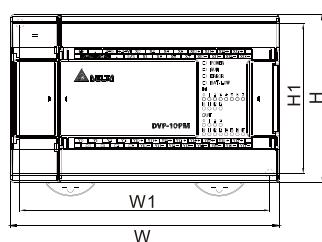
DVP-ES3/ES2/EX2 Series

| Model Name (mm) | L | L1 | Type |
|-----------------|-----|-----|------|
| DVP08XM211N | 45 | 37 | ① |
| DVP08XP211R/T | 45 | 37 | ① |
| DVP08XN211R/T | 45 | 37 | ① |
| DVP16XM211N | 70 | 62 | ② |
| DVP16XP211R/T | 70 | 62 | ② |
| DVP16XN211R/T | 70 | 62 | ② |
| DVP24XP200R/T | 145 | 137 | ② |
| DVP24XN200R/T | 145 | 137 | ② |
| DVP32XP200R/T | 145 | 137 | ② |
| DVP04AD-E2 | 70 | 62 | ② |
| DVP02DA-E2 | 70 | 62 | ② |
| DVP04DA-E2 | 70 | 62 | ② |
| DVP06XA-E2 | 70 | 62 | ② |
| DVP04PT-E2 | 70 | 62 | ② |
| DVP06PT-E2 New | 70 | 62 | ② |
| DVP04TC-E2 | 70 | 62 | ② |
| DVP10RC-E2 | 70 | 62 | ② |



DVP-PM Series

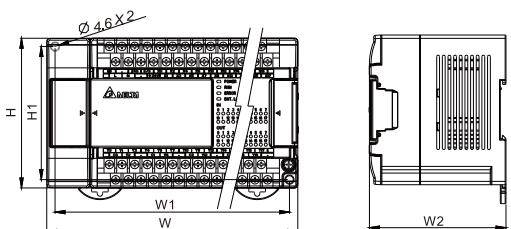
| Model Name (mm) | H | H1 | W | W1 | W2 |
|-----------------|----|----|-------|-------|----|
| DVP20PM00D | 90 | 80 | 174 | 164 | 82 |
| DVP20PM00M | 90 | 80 | 174 | 164 | 82 |
| DVP10PM00M | 90 | 80 | 143.5 | 133.5 | 82 |



DVP-EH3 Series

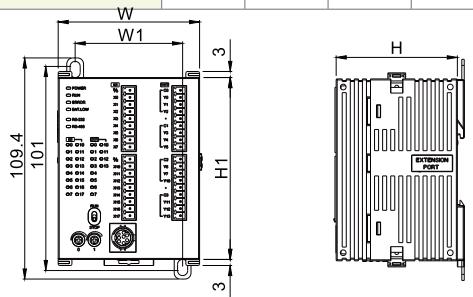
| Model Name (mm) | H | H1 | W | W1 | W2 |
|------------------|----|----|-------|-------|----|
| DVP16EH00R3 / T3 | 90 | 80 | 113 | 103 | 82 |
| DVP20EH00R3/T3 | 90 | 80 | 113 | 103 | 82 |
| DVP32EH00M3/MT | 90 | 80 | 143.5 | 133.5 | 82 |
| DVP32EH00R3/T3 | 90 | 80 | 143.5 | 133.5 | 82 |
| DVP32EH00R3-L | 90 | 80 | 143.5 | 133.5 | 82 |
| DVP32EH00T3-L | 90 | 80 | 143.5 | 133.5 | 82 |
| DVP40EH00R3/T3 | 90 | 80 | 158.8 | 153.8 | 82 |
| DVP48EH00R3/T3 | 90 | 80 | 174 | 164 | 82 |
| DVP64EH00R3/T3 | 90 | 80 | 212 | 202 | 82 |
| DVP80EH00R3/T3 | 90 | 80 | 276 | 266 | 82 |

*The dimensions of the DVP-EH3 and DVP-EH2 Series are the same.

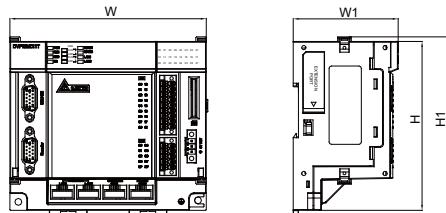


DVP-SV / SX2 / MC Series

| Model Name (mm) | H | H1 | W | W1 |
|-----------------|----|----|----|------|
| DVP28SV11R2/T2 | 60 | 90 | 70 | 53.2 |
| DVP20SX211R/T/S | 60 | 90 | 70 | 53.2 |
| DVP10MC11T | 60 | 90 | 70 | 53.2 |



| Model Name (mm) | H | H1 | W | W1 |
|-----------------|-----|-------|-----|------|
| DVP15MC11T | 110 | 116.2 | 128 | 68.4 |
| DVP15MC11T-06 | 110 | 116.2 | 128 | 68.4 |
| DVP50MC11T | 110 | 116.2 | 128 | 68.4 |
| DVP50MC11T-06 | 110 | 116.2 | 128 | 68.4 |

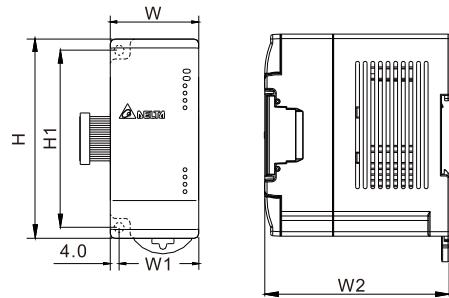


DVP-EH3 Series I/O & Extension Modules

| Model Name (mm) | H | H1 | W | W1 | W2 |
|-----------------|----|----|-------|-------|------|
| DVP08HM11N | 90 | 80 | 40 | 36 | 82 |
| DVP16HM11N | 90 | 80 | 55 | 51 | 82 |
| DVP32HM11N | 90 | 80 | 143.5 | 133.5 | 82.2 |
| DVP08HN11R/T | 90 | 80 | 40 | 36 | 82 |
| DVP32HN00R/T | 90 | 80 | 143.5 | 133.5 | 82.2 |
| DVP08HP11R/T | 90 | 80 | 40 | 36 | 82 |
| DVP16HP11R/T | 90 | 80 | 55 | 51 | 82 |
| DVP32HP00R/T | 90 | 80 | 143.5 | 133.5 | 82.2 |
| DVP48HP00R/T | 90 | 80 | 174 | 164 | 82.2 |

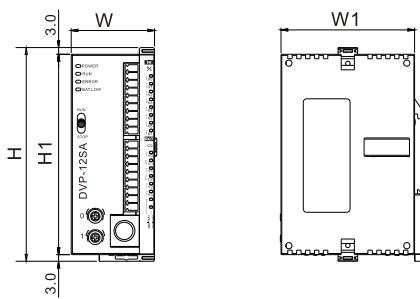
| Model Name (mm) | H | H1 | W | W1 | W2 |
|-----------------|----|----|----|----|----|
| DVP04AD-H2 | 90 | 80 | 60 | 56 | 82 |
| DVP04DA-H2 | 90 | 80 | 60 | 56 | 82 |
| DVP06XA-H2 | 90 | 80 | 60 | 56 | 82 |
| DVP04PT-H2 | 90 | 80 | 60 | 56 | 82 |
| DVP04TC-H2 | 90 | 80 | 60 | 56 | 82 |
| DVP01PU-H2 | 90 | 80 | 60 | 56 | 82 |
| DVPDT02-H2 | 90 | 80 | 40 | 46 | 82 |
| DVPCP02-H2 | 90 | 80 | 40 | 46 | 82 |
| DVPPF02-H2 | 90 | 80 | 40 | 46 | 82 |
| DVP04AD-H3 | 90 | 80 | 60 | 56 | 82 |
| DVP04DA-H3 | 90 | 80 | 60 | 56 | 82 |
| DVP06XA-H3 | 90 | 80 | 60 | 56 | 82 |

*The dimensions of the DVP-EH3 and DVP-EH2 Series are the same.



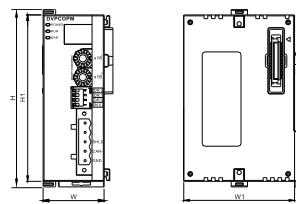
DVP-SE / SX / SS2 / SA2 Series

| Model Name (mm) | H | H1 | W | W1 |
|-----------------|----|----|------|----|
| DVP28SS211R/T/S | 96 | 90 | 46 | 60 |
| DVP28SA211R/T/S | 96 | 90 | 46 | 60 |
| DVP26SE11R/T/S | 96 | 90 | 46 | 60 |
| DVP14SS211R/T | 96 | 90 | 25.2 | 60 |
| DVP12SS211S | 96 | 90 | 25.2 | 60 |
| DVP12SA211R/T | 96 | 90 | 37.4 | 60 |
| DVP12SE11R/T | 96 | 90 | 37.4 | 60 |
| DVP10SX11R/T | 96 | 90 | 37.4 | 60 |



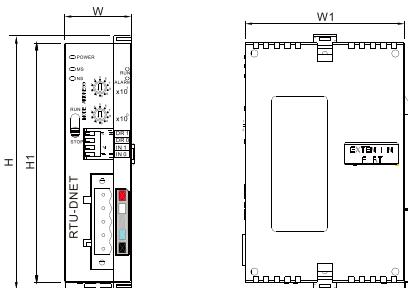
High-Speed Extension Modules (left-side)

| Model Name (mm) | H | H1 | W | W1 |
|-----------------|----|----|------|----|
| DVPEN01-SL | 96 | 90 | 33.1 | 60 |
| DVPCOPM-SL | 96 | 90 | 33.1 | 60 |
| DVPDNET-SL | 96 | 90 | 33.1 | 60 |
| DVPPF02-SL | 96 | 90 | 33.1 | 60 |
| DVPSCM12-SL | 96 | 90 | 33.1 | 60 |
| DVPSCM52-SL | 96 | 90 | 33.1 | 60 |
| DVP04AD-SL | 96 | 90 | 33.1 | 60 |
| DVP04DA-SL | 96 | 90 | 33.1 | 60 |
| DVP01LC-SL | 96 | 90 | 33.1 | 60 |
| DVP02LC-SL | 96 | 90 | 33.1 | 60 |
| DVP201LC-SL | 96 | 90 | 33.1 | 60 |
| DVP202LC-SL | 96 | 90 | 33.1 | 60 |
| DVP211LC-SL | 96 | 90 | 33.1 | 60 |



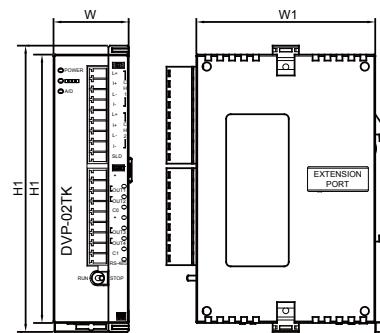
Remote I/O Modules

| Model Name (mm) | H | H1 | W | W1 |
|-----------------------------|----|----|------|----|
| RTU-DNET | 96 | 90 | 25.2 | 60 |
| RTU-485 | 96 | 90 | 25.2 | 60 |
| RTU-EN01 | 96 | 90 | 25.2 | 60 |
| RTU-PD01 | 96 | 90 | 25.2 | 60 |
| RTU-CN01 <small>New</small> | 96 | 90 | 25.2 | 60 |
| RTU-ECAT <small>New</small> | 96 | 90 | 25.2 | 60 |



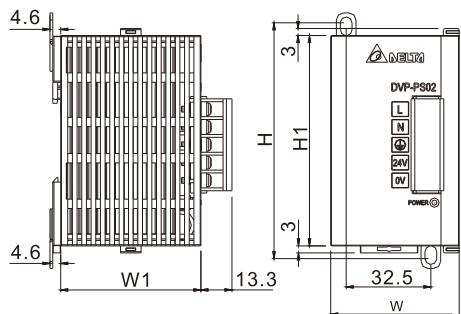
Remote Temperature Control Modules

| Model Name (mm) | H | H1 | W | W1 |
|-----------------|----|----|------|----|
| DVP02TKN-S | 96 | 90 | 25.2 | 60 |
| DVP02TKR-S | 96 | 90 | 25.2 | 60 |
| DVP02TKL-S | 96 | 90 | 25.2 | 60 |



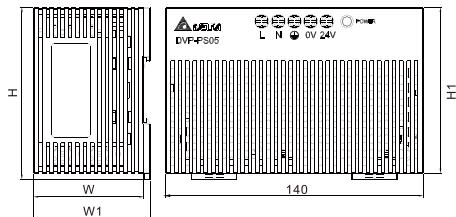
DVP-PS01/02 Power Supply Modules

| Model Name (mm) | H | H1 | W | W1 |
|-----------------|-----|----|------|----|
| DVPPS01 | 100 | 90 | 36.5 | 60 |
| DVPPS02 | 100 | 90 | 55 | 60 |

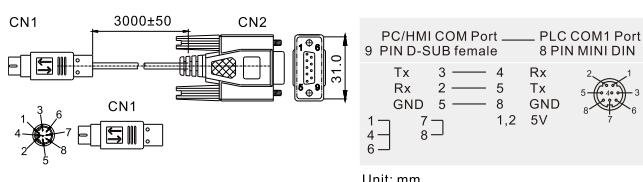


DVP-PS05 Power Supply Modules

| Model Name (mm) | H | H1 | W | W1 |
|-----------------|------|----|----|------|
| DVPPS05 | 93.3 | 90 | 60 | 63.4 |

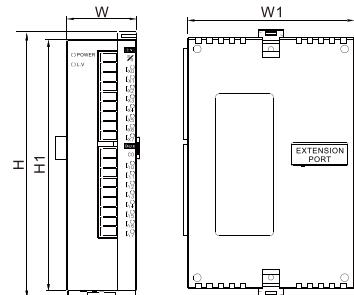


PIN Definition of UC-MS030-01A

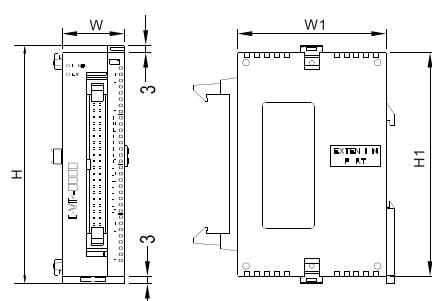


DVP-S Series I/O and Extension Modules

| Model Name (mm) | H | H1 | W | W1 |
|-----------------|----|----|------|----|
| DVP08SM11N | 96 | 90 | 25.2 | 60 |
| DVP16SM11N | 96 | 90 | 25.2 | 60 |
| DVP06SN11R | 96 | 90 | 25.2 | 60 |
| DVP08SN11R/T/TS | 96 | 90 | 25.2 | 60 |
| DVP08SP11R/T/TS | 96 | 90 | 25.2 | 60 |
| DVP16SP11R/T/TS | 96 | 90 | 25.2 | 60 |
| DVP16SN11T | 96 | 90 | 25.2 | 60 |
| DVP16SN11TS | 96 | 90 | 25.2 | 60 |
| DVP04AD-S | 96 | 90 | 25.2 | 60 |
| DVP04AD-S2 | 96 | 90 | 25.2 | 60 |
| DVP06AD-S | 96 | 90 | 25.2 | 60 |
| DVP04DA-S | 96 | 90 | 25.2 | 60 |
| DVP04DA-S2 | 96 | 90 | 25.2 | 60 |
| DVP06XA-S | 96 | 90 | 25.2 | 60 |
| DVP06XA-S2 | 96 | 90 | 25.2 | 60 |
| DVP04PT-S | 96 | 90 | 25.2 | 60 |
| DVP08NTC-S | 96 | 90 | 25.2 | 60 |
| DVP06PT-S | 96 | 90 | 25.2 | 60 |
| DVP04TC-S | 96 | 90 | 25.2 | 60 |
| DVP01PU-S | 96 | 90 | 25.2 | 60 |
| DVPPF01-S | 96 | 90 | 25.2 | 60 |
| DVPDT01-S | 96 | 90 | 25.2 | 60 |
| DVP02TUN-S | 96 | 90 | 25.2 | 60 |
| DVP02TUR-S | 96 | 90 | 25.2 | 60 |
| DVP02TUL-S | 96 | 90 | 25.2 | 60 |



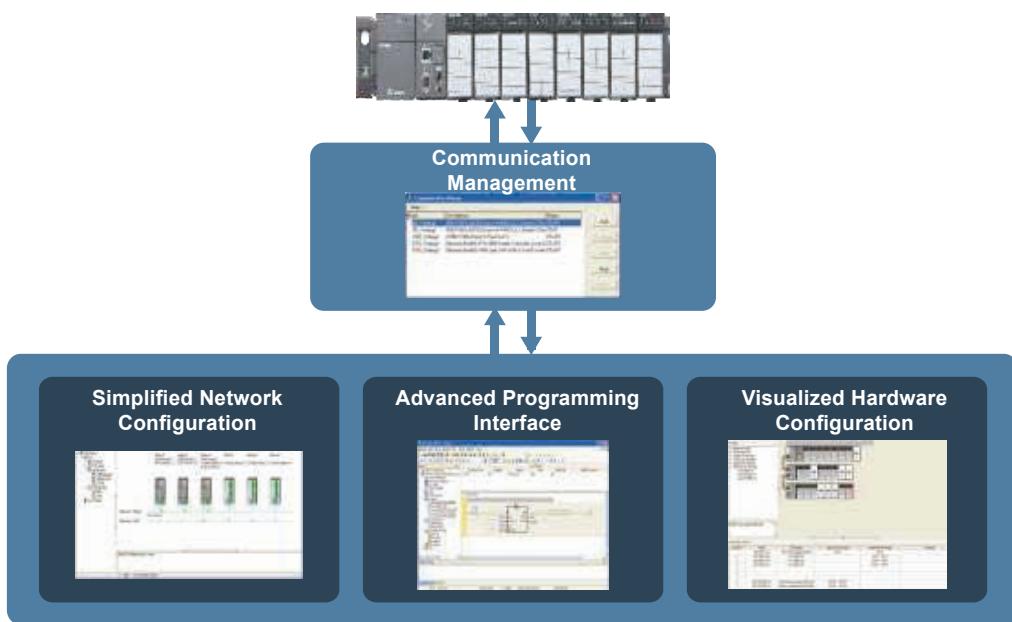
| Model Name (mm) | H | H1 | W | W1 |
|-----------------|----|----|------|----|
| DVP32SN11TN | 96 | 90 | 25.2 | 60 |
| DVP32SM11N | 96 | 90 | 25.2 | 60 |



PLC Editing Software: ISPSoft V2.0

Highly Accessible Programming Software with Fully Integrated Interface

Advanced Programming Interface + Visualized Hardware Configuration + Simplified Network Configuration

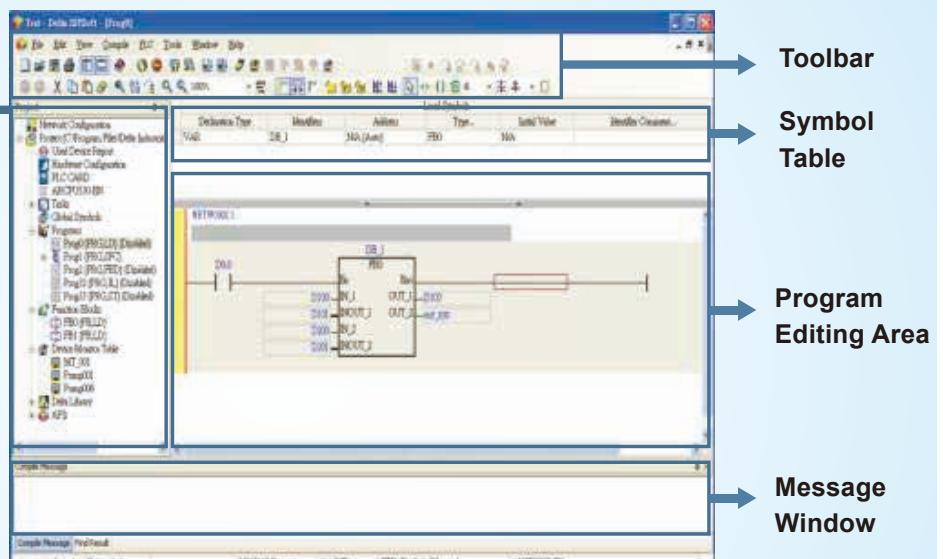


Advanced Programming Interface

Project Management

Window

- **New functions:** Network configuration (NWCONFIG), hardware configuration (HWCONFIG) and PLC card utility
- 5 programming languages for programs and function blocks (FB): LD/FBD/SFC/IL/ST
- **Function Blocks:** Symbols can be introduced in call-by-value or call-by-reference types. Function blocks can be called in a function block for up to 32 levels
- **Monitor Table:** It can be stored and managed separately. Multiple monitor tables can be stored in a single project
- **User Library:** Users can design frequently used instructions for specific applications in different industries
- **Task:** Supports cyclic, I/O interrupt, timer interrupt, external interrupt, and more. Software will provide the usable tasks for different CPUs
- Built-in Delta Function Blocks provide a convenient programming environment for operators



Visualized Hardware Configuration

Module Selection

Module Description

Toolbar

- System hardware configuration can be monitored in On-Line mode
- Hardware configuration can be displayed by Scan function

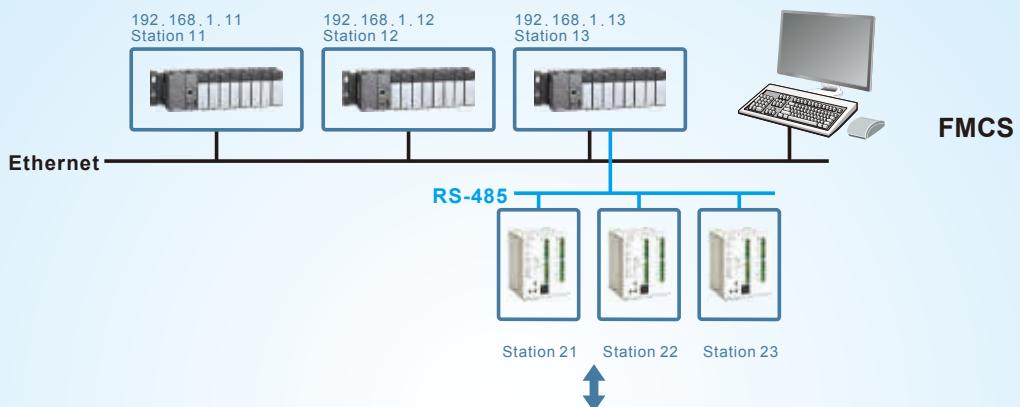
Hardware Configuration Area

- Operations of Cut/Copy/Paste/Delete are available for modules and racks
- Parameters of each module can be directly configured

Rack Information

- I/O device range can be specified by the user

Simplified Network Configuration



Network Device Selection

Toolbar

Network Configuration Area

- Master device settings
- Ether Link editing function
- PLC Link editing function

Network Information

Ether Link

PLC Link

4-Line Text Panel HMI

TP04G-AL-C

TP04G-AL2

- 4.1" STN-LCD
- User-defined function keys available
- Supports RS-232/RS-422/RS-485 ports (TP04G-AL2)
- Password protection function available
- User-defined boot screen available
- Built-in real time clock (RTC)

| | |
|------------------|-------------------------|
| Dimensions | 4.1" (101.8 × 35.24 mm) |
| Resolution | 192 × 64 |
| Display Color | Monochrome |
| Flash Memory | 256k bytes |
| Function Key | 10 function keys |
| Password | Available |
| Recipe Function | Not available |
| RTC | Available |
| Serial COM Port | RS-232 & RS-422/485 |
| Editing Software | TPEditor |

4-Line Text Panel HMI

TP04G-BL-C

- 4.1" STN-LCD
- 0~9 numeric keys and user-defined function available
- Built-in RS-232 and RS-422/RS-485 ports
- Supports Modbus ASCII/RTU modes
- Password protection function available
- User-defined boot screen available
- Built-in real time clock (RTC)

| | |
|------------------|-------------------------|
| Dimensions | 4.1" (101.8 × 35.24 mm) |
| Resolution | 192 × 64 |
| Display Color | Monochrome |
| Flash Memory | 256k bytes |
| Function Key | 17 function keys |
| Password | Available |
| Recipe Function | Not available |
| RTC | Available |
| Serial COM Port | RS-232 & RS-422/485 |
| Editing Software | TPEditor |

8-Line Text Panel HMI

TP08G-BT2

- 3.8" STN-LCD
- Resolution: 240x128 dots
- Built-in 1,024KB flash memory
- 24 user-defined function keys
- Built-in RS-232 and RS-422/RS-485 ports
- Supports recipes and macro functions

| | |
|------------------|---------------------|
| Dimensions | 3.8" (83 x 41 mm) |
| Resolution | 240 × 128 |
| Display Color | Monochrome |
| Flash Memory | 1 M bytes |
| Function Key | 24 function keys |
| Password | Available |
| Recipe Function | Available |
| RTC | Available |
| Serial COM Port | RS-232 & RS-422/485 |
| Editing Software | TPEditor |

Applications

Intelligent control systems for aquaculture, steel sleeve tapping machines, air compressors, plant factories

7-Inch Touch Panel HMI with Built-in PLC

TP70P-RMO

- ▶ Adopts the core of the DVP-SS2 Series PLC:
program capacity: 2k steps / D device: 5k words
- ▶ 7" TFT-LCD
- ▶ Touch screen
- ▶ Built-in USB port for program upload/download
- ▶ Built-in RS-232 and RS-485 ports
- ▶ Supports Modbus ASCII/RTU modes
- ▶ Built-in real time clock (RTC)

| | |
|------------------|------------------|
| Dimensions | 7" (154 × 85 mm) |
| Resolution | 800 × 480 |
| Display Color | 65,535 colors |
| Flash Memory | 64 M bytes |
| Function Key | Not available |
| Password | Available |
| Recipe Function | Not available |
| RTC | Available |
| Serial COM Port | RS-232 & RS-485 |
| Editing Software | TPEditor |

7-Inch Touch Panel HMI with Built-in PLC

TP70P

- ▶ Adopts the core of the DVP-SS2 Series PLC:
program capacity: 4k steps / D device: 5k words
- ▶ Provides 2 sets of 10kHz high-speed pulse input
- ▶ 7" TFT-LCD
- ▶ Touch screen
- ▶ Built-in USB port for program upload/download
- ▶ Built-in RS-485 port*2
- ▶ Supports Modbus ASCII/RTU modes
- ▶ Built-in real time clock (RTC)
- ▶ Digital and analog I/O terminals available

| | |
|------------------|------------------|
| Dimensions | 7" (154 × 85 mm) |
| Resolution | 800 × 480 |
| Display Color | 65,535 colors |
| Flash Memory | 64 M bytes |
| Function Key | Not available |
| Password | Available |
| Recipe Function | Not available |
| RTC | Available |
| Serial COM Port | 2 sets of RS-485 |
| Editing Software | TPEditor |

4-Line Text Panel HMI with Built-in PLC

TP04P

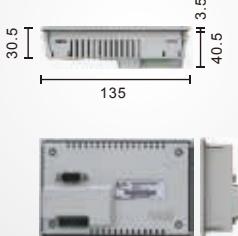
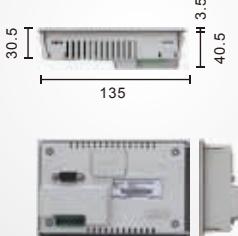
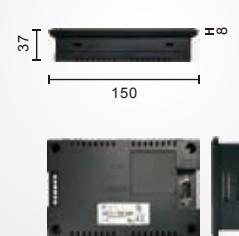
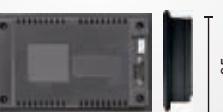
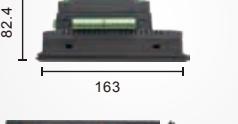
- ▶ Adopts the core of the DVP-SS2 Series PLC:
program capacity: 8k steps / D device: 5k words
- ▶ Provides 2 sets of 10kHz high-speed pulse input
(Excludes TP04P-08TP1R)
- ▶ 4.1" STN-LCD
- ▶ Provides 0~9 numeric keys with user-defined function
- ▶ Built-in USB port for program upload/download
- ▶ Built-in RS-485 port*2
- ▶ Supports Modbus ASCII/RTU modes
- ▶ User-defined boot screen available
- ▶ Built-in real time clock (RTC)
- ▶ Digital and analog I/O terminals available

| | |
|------------------|-------------------------|
| Dimensions | 4.1" (101.8 × 35.24 mm) |
| Resolution | 192 × 64 |
| Display Color | Monochrome |
| Flash Memory | 1 M bytes |
| Function Key | 17 function keys |
| Password | Available |
| Recipe Function | Not available |
| RTC | Available |
| Serial COM Port | 2 sets for RS-485 |
| Editing Software | TPEditor |

| | | Text Panel HMI | | | | | | Text/Touch Panel HMI with Built-in PLC | | | | |
|---|---------------|--|--------------------|----------------------|----------------------------|--|--|---|---|--------------|--|--|
| Model | | TP02G-AS1 | TP04G-AS2 | TP08G-BT2 | TP04G-AL-C | TP04G-AL2 | TP04G-BL-C | TP04P-Series | TP04P-08TP1R | TP70P-Series | | |
| | | | | | | | | | | | | |
| Display Specifications | Screen Type | STN-LCD | | | | | | | | TFT-LCD | | |
| | Display Color | Monochrome | | | | | | | | 65,535 | | |
| | Resolution | 160 x 32 | 128 x 64 | 240 x 128 | 192 x 64 | | | 800 x 480 | | | | |
| | Backlight | Life span of backlight is about 50,000 hours at 25°C | | | | | | | | 20,000 hours | | |
| | Display Range | 72 x 22 mm (67 x 32 mm) | 3" (83 x 41 mm) | 3.8" (83 x 41 mm) | 4.1" (101.8 x 35.24 mm) | | | 7" (154 x 85 mm) | | | | |
| Flash Memory | | 256k bytes | 1M bytes | 256k bytes | | 1M bytes | | 64M bytes | | | | |
| Program Download Port | | COM1 (RS-232) | | | | | COM1 (USB) | | USB | | | |
| Serial COM Port | COM1 | RS-232 | RS-232/422 | RS-232 | RS-232/422 | RS-232 | - | | - | | | |
| | COM2 | RS-485 | | - | RS-422/485 | RS-422/485 | RS-485 | | TP70 with I/O: RS-485 TP70R-RM0: RS-232 | | | |
| | COM3 | - | | - | - | - | RS-485 | | | | | |
| Extension Interface | | The slot for program copy card | | | | | | | - | | | |
| Real-time Clock | | - | Built-in | | | | | | | | | |
| Auxiliary Keys | System Keys | 6 | 7 | 12 | 5 | 7 | 5 | - | | | | |
| | Function Keys | 10 | 5 | 12 | 5 | 10 | 5 | - | | | | |
| Operating Voltage | | +24 V _{DC} (-10% ~ +20%) | | | | | | | | - | | |
| Backup Battery | | 3V lithium battery CR2032 x 1/battery life: 5 years | | | | | | | | | | |
| Buzzer | | 85 dB | | | | | | | | | | |
| Cooling Method | | Natural air circulation | | | | | | | | | | |
| Operating Temperature | | 0 °C ~ 50 °C | | | | | | | | | | |
| Storage Temperature | | -20 °C ~ +60 °C | | | | | | | | | | |
| Operating Humidity | | 10% ~ 90% RH (0 ~ 40°C) | | | | | | | | | | |
| Vibration | | IEC 61131-2, IEC 68-2-6 (TEST Fc); 5 Hz ≤ f < 8.4 Hz Continuous: 3.5 mm; 8.4 Hz ≤ f ≤ 150 Hz Continuous: 1.0 g | | | | | | | | | | |
| Shock | | IEC 61131-2, IEC 68-2-27 (TEST Ea); 15g peak, 11ms duration, half-sine, three shocks in each direction per axis, on 3 mutually perpendicular axes (total of 18 shocks) | | | | | | | | | | |
| Radiated Emission | | CISPR11, Class A Frequency: 30 ~ 230 MHz, Limits: 40 dB uV/m Frequency: 230 MHz ~ 1 GHz, Limits: 47 dB uV/m | | | | | | | | | | |
| Radiated Electromagnetic Field | | EN61000-4-3, Frequency: 80 ~ 2000 MHz, Limits: 10V/m | | | | | | | | | | |
| Electrostatic Discharge | | EN61000-4-2, Air Discharge: 8 KV, Contact Discharge: 4 KV | | | | | | | | | | |
| Fast Transient Burst | | EN61000-4-4, Power Line: 1 KV, Communication I/O: 500 V | | | | | | | | | | |
| Dimensions Width (W) x Height (H) x Depth (D) | | 147 x 97 x 35.5 | 210 x 122 x 45 | 163.6 x 108.6 x 37 | 175.8 x 108.8 x 37 | TP04P Series: 175.8 x 108.6 x 59.2 TP04P-20EXL1T: 175.8 x 108.6 x 82.4 | 175.8 x 108.6 x 37 | TP70P Series: 205.6 x 142.6 x 49 TP70P-RM0: 205.6 x 142.6 x 37 TP70P-211LC1T : 205.6 x 142.6 x 87.7 | | | | |
| Panel Cutout | | 136 x 85 | 196 x 108 | 151 x 96 | 163 x 96 | 163 x 96 | | | 191 x 128 | | | |
| Weight | | 240g | 430g | 268g | 270g | 292g | TP04P Series: 500 g TP04P-20EXL1T: 650 g | 333 g | TP70P Series: 680 g TP70P-RM0: 620 g TP70P-211LC1T: 900 g | | | |
| Safety Approvals (Waterproof Class of Front Panel) | | IP66/NEMA4 & CE, UL Type 4 indoor | | | | | | | | | | |
| Editing Software | | TPEditor V1 | | | | | | | | | | |

Product Outline and Dimensions

Unit: mm

| TP02G-AS1 | TP04G-AS2 | TP04G-AL-C/TP04G-AL2 | TP04G-BL-C |
|---|---|--|--|
|    |    |    |    |
| TP04P-Series (Exclude TP04P-08TP1R, TP04P-20EXL1T) | TP08G-BT2 | TP70P-Series (Exclude TP70P-RM0, TP70P-211LC1T) | TP70P-RM0 |
|    |    |    |    |
| TP04P-08TP1R | TP04P-20EXL1T | TP70P-211LC1T | |
|    |    |    | |

DVP Series Model Name Instructions

| | | |
|---|---|--|
| • PLC | • DI/DO Module | • AI/AO Module |
| <p>Series ① ② ③ ④ ⑤</p> | <p>Series ① ② ③ ④ ⑤</p> | <p>Series ① ② ③</p> |
| 1. Total I/O 2. Model ES/ES2/ES3: DVP-ES/ES2/ES3 series PLC EX/EX2: DVP-EX/EX2 series PLC SS/SS2: DVP-SS/SS2 series PLC SA/SA2: DVP-SA/SA2 series PLC SX/SX2: DVP-SX/SX2 series PLC SC: DVP-SC series PLC SV: DVP-SV series PLC SE: DVP-SE series PLC PM: DVP-PM series PLC MC: DVP-MC series PLC EH: DVP-EH series PLC EC: DVP-EC series PLC 3. Power supply 00: AC power input 11: DC power input 4. Output type R: Relay T: Transistor (NPN) M: Mixed with differential signal S: Transistor (PNP) RC: Relay + CANopen TC: Transistor + CANopen RE: Relay + Ethernet TE: Transistor + Ethernet 5. Version | 1. Total I/O 2. Model X: DVP-ES/EX/ES2/EX2 series PLC S: DVP-SS/SA/SX/SC/SV/SS2/ SA2/ SX2/SV2/SE/MC series PLC H: DVP-EH2/EH3/PM series PLC 3. I/O type M: Input point N: Output point P: Input + output 4. Power supply 00: AC power input 11: DC power input 5. Output type R: Relay T: Transistor (NPN) TS: Transistor (PNP) N: None output | 1. Total I/O 2. Module function AD: Analog/digital conversion DA: Digital/analog conversion PT: PT type temperature module TC: Thermocouple type temperature Module XA: AD + DA module LC: Load cell module RC: Resolver module 3. Compatible model S or S2: DVP-SS/SA/SX/SC/SV/SS2/ SA2/SX2/SV2/SE/MC Series PLC SL: left-side extension for DVP-S Series PLC E2: DVP-ES2/EX2 Series PLC |
| • PI/PO Module | • Function Card | • Network Module |
| <p>Series ① ② ③</p> | <p>Series ① ② ③</p> | <p>Series ① ②</p> |
| 1. Total I/O 2. Module function HC: High-speed counter PU: Single-axis positioning module 3. Compatible model S: DVP-SS/SA/SX/SC/SV/SS2/SA2 SX2/SV2/SE/MC Series PLC H2/H3: DVP-EH2/EH3/PM Series PLC SL: left-side extension for DVP-S Series PLC | 1. Function Card 2. Function 232: RS-232 card 422: RS-422 card 485: RS-485 card 2AD: 2ch analog input 2DA: 2ch analog output 3. Particular definition S: Slave mode (applicable to COM3 coding only) | 1. Module function EN01: Modbus TCP DNET: DeviceNet master COPM: CANopen master CP02: CANopen Slave DT01/02: DeviceNet Slave PF01/02: PROFIBUS DP Slave 2. Compatible model S: DVP-SS/SA/SX/SC/SV/SS2/ SA2/SX2/SV2/SE/MC Series PLC H2/H3: DVP- EH2/EH3/PM Series PLC SL: left-side extension for DVP-S Series PLC |
| • Remote I/O | • Accessory: Cable | • Accessory: Other |
| <p>Series ①</p> | <p>Series ① ② ③ ④</p> | <p>Series ① ② ③</p> |
| 1. Type DNET: DeviceNet 485: RS-485 EN01: Modbus TCP | 1. Accessory 2. Accessory definition CAB: Cable | 1. Accessory 2. Accessory definition Bt: Battery |
| | 3. Type 1, 2, 3, 4, | 3. Type: 01, 02 |
| | 4. Cable length 15: 1.5 m 30: 3.0 m | |

*For the availability of the product models, please contact Delta sales representatives or

ue.

DVP Series PLC Function Overview

Select your desired specifications and locate the most suitable PLC.



| Item | Specifications | Check | Model | | | | | | | |
|---------------------|--------------------------|--------------------------|-------|-----|-----|-----|-----|-----|-----|-----|
| | | | ES2 | EX2 | EH3 | SS2 | SA2 | SX2 | SV2 | SE |
| Power Supply | AC | <input type="checkbox"/> | ○ | ○ | ○ | | | | | |
| | DC | <input type="checkbox"/> | | | | ○ | ○ | ○ | ○ | ○ |
| I/O Points | < 256 | <input type="checkbox"/> | △ | △ | | | | | | |
| | < 512 | <input type="checkbox"/> | | | △ | △ | △ | △ | △ | △ |
| Program Capacity | < 8 k | <input type="checkbox"/> | | | | ○ | | | | |
| | < 16 k | <input type="checkbox"/> | ○ | ○ | | | ○ | ○ | | ○ |
| | < 32 k | <input type="checkbox"/> | | | ○ | | | | ○ | |
| Output Type | Transistor (NPN) | <input type="checkbox"/> | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | Transistor (PNP) | <input type="checkbox"/> | | | | ○ | △ | ○ | ○ | △ |
| | Relay | <input type="checkbox"/> | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | Differential signal | <input type="checkbox"/> | | | ○ | | | | | |
| Communication | 3 COM ports (RS-232/485) | <input type="checkbox"/> | ○ | ○ | △ | | ○ | △ | △ | △ |
| | Ethernet | <input type="checkbox"/> | ○ | | △ | | △ | △ | △ | ○ |
| | USB | <input type="checkbox"/> | | | | | | ○ | | ○ |
| | DeviceNet | <input type="checkbox"/> | | | △*1 | | △*1 | △*1 | △*1 | △*1 |
| | CANopen | <input type="checkbox"/> | | | △*1 | | △*1 | △*1 | △*1 | △*1 |
| | PROFIBUS | <input type="checkbox"/> | | | △*1 | | △*1 | △*1 | △*1 | △*1 |
| Positioning | 2-axis output | <input type="checkbox"/> | ○ | ○ | ○ | ○ | ○ | ○ | | ○ |
| | 4-axis output | <input type="checkbox"/> | | | ○ | | | | ○ | |
| | > 4 axes | <input type="checkbox"/> | | | △ | △ | △ | △ | △ | △ |
| | 2-axis interpolation | <input type="checkbox"/> | ○ | ○ | ○ | | ○ | ○ | ○ | ○ |
| | 100 kHz high speed | <input type="checkbox"/> | ○ | ○ | | | ○ | ○ | | ○ |
| | 200 kHz high speed | <input type="checkbox"/> | | | ○ | △ | △ | △ | ○ | △ |
| High-speed Counting | ≤ 2 channels | <input type="checkbox"/> | ○ | ○ | | ○ | ○ | ○ | | ○ |
| | ≥ 3 channels | <input type="checkbox"/> | | | ○*3 | △ | △ | △ | ○ | △ |
| | 100 kHz high speed | <input type="checkbox"/> | ○ | ○ | | | ○ | ○ | | ○ |
| | 200 kHz high speed | <input type="checkbox"/> | | | ○ | △ | △ | △ | ○ | △ |
| Analog Function | < 4 channels (AD) | <input type="checkbox"/> | △ | ○ | △ | △ | △ | ○ | △ | △ |
| | < 2 channels (DA) | <input type="checkbox"/> | △ | ○ | ○*2 | △ | △ | △ | ○*2 | △ |

Note:

○ With such specification ○ Varies upon model △ With such specification when connected to extension module/function card

*1: Series that support left-side modules can support both master and slave; other series support only slave

*2: DVP-EX / SX2 Series have 4 channels of analog input and 2 channels of analog output

*3: In addition to the built-in 4 channels of high-speed counters, the DVP-EH3 Series can connect high-speed counter modules

Ordering Information

DVP-EC3 Series PLC

| Product Name | Power Supply | Output Method | Inputs | Outputs | Model Name | Certificates |
|--------------------------|------------------------|---------------|--------|---------|-------------|--|
| DVP-EC3 Series Basic PLC | 100~240V _{AC} | Relay | 6 | 4 | DVP10EC00R3 |   |
| | 100~240V _{AC} | Transistor | 6 | 4 | DVP10EC00T3 | |
| | 100~240V _{AC} | Relay | 8 | 6 | DVP14EC00R3 | |
| | 100~240V _{AC} | Transistor | 8 | 6 | DVP14EC00T3 | |
| | 100~240V _{AC} | Relay | 8 | 8 | DVP16EC00R3 | |
| | 100~240V _{AC} | Transistor | 8 | 8 | DVP16EC00T3 | |
| | 100~240V _{AC} | Relay | 12 | 8 | DVP20EC00R3 | |
| | 100~240V _{AC} | Transistor | 12 | 8 | DVP20EC00T3 | |
| | 100~240V _{AC} | Relay | 12 | 12 | DVP24EC00R3 | |
| | 100~240V _{AC} | Transistor | 12 | 12 | DVP24EC00T3 | |
| | 100~240V _{AC} | Relay | 18 | 12 | DVP30EC00R3 | |
| | 100~240V _{AC} | Transistor | 18 | 12 | DVP30EC00T3 | |

DVP-EC3 Series PLC

| Product Name | Power Supply | Output Method | Inputs | Outputs | Model Name | Certificates |
|--|------------------------|---------------|--------|-----------------------------------|-------------|--|
| DVP-EC3 Series Basic PLC | 100~240V _{AC} | Relay | 16 | 16 | DVP32EC00R3 |   |
| | 100~240V _{AC} | Transistor | 16 | 16 | DVP32EC00T3 | |
| | 100~240V _{AC} | Relay | 24 | 16 | DVP40EC00R3 | |
| | 100~240V _{AC} | Transistor | 24 | 16 | DVP40EC00T3 | |
| | 100~240V _{AC} | Relay | 28 | 20 | DVP48EC00R3 | |
| | 100~240V _{AC} | Transistor | 28 | 20 | DVP48EC00T3 | |
| | 100~240V _{AC} | Relay | 36 | 24 | DVP60EC00R3 | |
| | 100~240V _{AC} | Transistor | 36 | 24 | DVP60EC00T3 | |
| Fastest execution time of basic instructions | | | 3.8 μs | Execution time of MOV instruction | | 5.04 μs |

Ordering Information

DVP-ES3/ES2/EX2 Series PLC

| Product Name | Power Supply | Output Method | Inputs | Outputs | Model Name | Certificates |
|--|------------------------|---------------------------------|-----------------------------------|---------|---|--|
| DVP-ES3 Series <small>New</small> Standard PLC | 24V _{DC} | Transistor | 16 | 16 | DVP32ES311T ^{*2} | |
| DVP-ES2 Series Standard PLC | 100~240V _{AC} | Relay | 8 | 8 | DVP16ES200R | |
| | 100~240V _{AC} | Transistor | 8 | 8 | DVP16ES200T | |
| | 100~240V _{AC} | Relay | 16 | 8 | DVP24ES200R | |
| | 100~240V _{AC} | Transistor | 16 | 8 | DVP24ES200T | |
| | 100~240V _{AC} | Relay | 16 | 16 | DVP32ES200R | |
| | 100~240V _{AC} | Transistor | 16 | 16 | DVP32ES200T | |
| | 24V _{DC} | Transistor | 16 | 16 | DVP32ES211T | |
| | 100~240V _{AC} | Relay | 24 | 16 | DVP40ES200R DVP40ES200RM ^{*1} | |
| | 100~240V _{AC} | Transistor | 24 | 16 | DVP40ES200T | |
| | 100~240V _{AC} | Relay | 36 | 24 | DVP60ES200R | |
| | 100~240V _{AC} | Transistor | 36 | 24 | DVP60ES200T | |
| | 100~240V _{AC} | Relay | 40 | 40 | DVP80ES200R | |
| | 100~240V _{AC} | Transistor | 40 | 40 | DVP80ES200T | |
| DVP-ES2 Series Standard PLC with Built-in CANopen | 100~240V _{AC} | Relay | 16 | 16 | DVP32ES200RC |  |
| | 100~240V _{AC} | Transistor | 16 | 16 | DVP32ES200TC |  |
| DVP-ES2 Series Standard PLC with Ethernet Communication | 100~240V _{AC} | Relay | 12 | 8 | DVP20ES200RE | |
| | 100~240V _{AC} | Transistor | 12 | 8 | DVP20ES200TE | |
| | 100~240V _{AC} | Relay | 16 | 16 | DVP32ES200RE | |
| | 100~240V _{AC} | Transistor | 16 | 16 | DVP32ES200TE | |
| | 100~240V _{AC} | Relay | 24 | 16 | DVP40ES200RE | |
| | 100~240V _{AC} | Transistor | 24 | 16 | DVP40ES200TE | |
| | 100~240V _{AC} | Relay | 36 | 24 | DVP60ES200RE | |
| | 100~240V _{AC} | Transistor | 36 | 24 | DVP60ES200TE | |
| | 100~240V _{AC} | Relay | 8 | 6 | DVP20EX200R | |
| | | Analog | 4 | 2 | | |
| DVP-EX2 Series Temperature/ Analog PLC | 100~240V _{AC} | Transistor | 8 | 6 | DVP20EX200T | |
| | | Analog | 4 | 2 | | |
| | 100~240V _{AC} | Relay | 16 | 10 | DVP30EX200R | |
| | | Analog | 3 | 1 | | |
| | 100~240V _{AC} | Transistor | 16 | 10 | DVP30EX200T | |
| | | Analog | 3 | 1 | | |
| Fastest execution time of basic instructions | | ES3: 0.025μs ES2/EX2: 0.35μs | Execution time of MOV instruction | | | ES3: 0.15μs ES2/EX2: 3.4μs |

*1: Built-in SD card slot

*2: Please contact our distributors for release date

DVP-ES3/ES2/EX2 Series Digital I/O Module (AC power supply)

| Product Name | Power Supply | Output Method | Inputs | Outputs | Model Name | Certificates |
|-----------------------|------------------------|---------------|--------|---------|-------------|---|
| Digital Module | 100~240V _{AC} | Relay | - | 24 | DVP24XN200R |  |
| | 100~240V _{AC} | Transistor | - | 24 | DVP24XN200T |  |
| | 100~240V _{AC} | Relay | 16 | 8 | DVP24XP200R | |
| | 100~240V _{AC} | Transistor | 16 | 8 | DVP24XP200T | |
| | 100~240V _{AC} | Relay | 16 | 16 | DVP32XP200R | |
| | 100~240V _{AC} | Transistor | 16 | 16 | DVP32XP200T | |

DVP-ES3/ES2/EX2 Series Digital/Analog/Special Module (24V_{DC})

| Product Name | Output Method | Inputs | Outputs | Model Name | Certificates |
|--------------------------------|--|--------|---------|-------------|--|
| Digital Module | - | 8 | - | DVP08XM211N |   |
| | Relay | - | 8 | DVP08XN211R | |
| | Transistor | - | 8 | DVP08XN211T | |
| | Relay | 4 | 4 | DVP08XP211R | |
| | Transistor | 4 | 4 | DVP08XP211T | |
| | - | 16 | - | DVP16XM211N | |
| | Relay | - | 16 | DVP16XN211R | |
| | Transistor | - | 16 | DVP16XN211T | |
| | Relay | 8 | 8 | DVP16XP211R | |
| | Transistor | 8 | 8 | DVP16XP211T | |
| Analog I/O Module | • 4 points of analog voltage (10V, 5V)/current (20mA, 0~20mA, 4~20mA) input ^{**1} | | | | DVP04AD-E2 |
| | • Resolution: 14-bit (-32,000~+32,000) | | | | |
| | • 4 points of analog voltage (-10V~+10V)/current (0~20mA, 4~20mA) output ^{**1} | | | | DVP04DA-E2 |
| | • Resolution: 14-bit (-32,000~+32,000)/(0~+32,000) | | | | |
| | • 2 points of analog voltage (-10V~+10V)/current (0~20mA, 4~20mA) output ^{**1} | | | | DVP02DA-E2 |
| | • Resolution: 14-bit (-32,000~+32,000)/(0~+32,000) | | | | |
| Temperature Measurement Module | • 4 points of analog voltage (10V, 5V)/current (20mA, 0~20mA, 4~20mA) input ^{**1} | | | | DVP06XA-E2 |
| | • Input resolution: 14-bit (-32,000~+32,000) | | | | |
| | • 2 points of analog voltage (-10V~+10V)/current (0~20mA, 4~20mA) output | | | | |
| | • Output resolution: 14-bit (-32,000~+32,000)/(0~+32,000) | | | | |
| Absolute Resolver Module | • Converts 1 set of resolver input signal (angle/speed) into digital signals | | | | DVP10RC-E2 |
| Extension module | • Extends distance between the I/O modules of the DVP-ES2 Series within a given distance | | | | DVPAEXT01-E2 |

*1. Digital/analog photocoupler isolation. No isolation among channels.

*2. Please contact our distributors for release date

DVP-EH3 Series PLC

| Product name | Power Supply | Output Method | Inputs | Outputs | Model Name | Certificates |
|--------------------------------------|------------------------|---------------------------|--------------|---------|---------------|--|
| DVP-EH3 Series High Performance PLC | 100~240V _{AC} | Relay | 8 | 8 | DVP16EH00R3 |   |
| | 100~240V _{AC} | Transistor | 8 | 8 | DVP16EH00T3 | |
| | 100~240V _{AC} | Relay | 12 | 8 | DVP20EH00R3 | |
| | 100~240V _{AC} | Transistor | 12 | 8 | DVP20EH00T3 | |
| | 100~240V _{AC} | Transistor | 16 | 16 | DVP32EH00T3 | |
| | 100~240V _{AC} | Relay | 16 | 16 | DVP32EH00R3 | |
| | 100~240V _{AC} | Differential + Relay | 16 | 16 | DVP32EH00M3 | |
| | 100~240V _{AC} | Differential + Transistor | 16 | 16 | DVP32EH00MT | |
| | 100~240V _{AC} | Relay | 16 | 16 | DVP32EH00R3-L | |
| | 100~240V _{AC} | Transistor | 16 | 16 | DVP32EH00T3-L | |
| | 100~240V _{AC} | Transistor | 24 | 16 | DVP40EH00T3 | |
| | 100~240V _{AC} | Relay | 24 | 16 | DVP40EH00R3 | |
| | 100~240V _{AC} | Relay | 24 | 24 | DVP48EH00R3 | |
| | 100~240V _{AC} | Transistor | 24 | 24 | DVP48EH00T3 | |
| | 100~240V _{AC} | Relay | 32 | 32 | DVP64EH00R3 | |
| | 100~240V _{AC} | Transistor | 32 | 32 | DVP64EH00T3 | |
| | 100~240V _{AC} | Relay | 40 | 40 | DVP80EH00R3 | |
| | 100~240V _{AC} | Transistor | 40 | 40 | DVP80EH00T3 | |
| Execution time of basic instructions | | | 0.24 μ s | | | |

Ordering Information

DVP-EH3 Series Digital/Analog Module

| Product Name | Output Method | Inputs | Outputs | Model Name | Certificates |
|---|---|--------|---------|------------|--------------|
| Digital Module | Relay | 4 | 4 | DVP08HP11R | |
| | Transistor | 4 | 4 | DVP08HP11T | |
| | Relay | - | 8 | DVP08HN11R | |
| | Transistor | - | 8 | DVP08HN11T | |
| | - | 8 | - | DVP08HM11N | |
| | Relay | 8 | 8 | DVP16HP11R | |
| | Transistor | 8 | 8 | DVP16HP11T | |
| | - | 16 | - | DVP16HM11N | |
| | - | 32 | - | DVP32HM11N | |
| | Relay | - | 32 | DVP32HN00R | |
| | Transistor | - | 32 | DVP32HN00T | |
| | Relay | 16 | 16 | DVP32HP00R | |
| | Transistor | 16 | 16 | DVP32HP00T | |
| | Relay | 24 | 24 | DVP48HP00R | |
| | Transistor | 24 | 24 | DVP48HP00T | |
| Analog Module | <ul style="list-style-type: none"> 4 points of analog voltage (-10V~+10V) / current (-20mA~+20mA)¹⁾ Input resolution: 14-bit Built-in RS-485 interface | | | | DVP04AD-H2 |
| | <ul style="list-style-type: none"> 4 points of analog voltage (0V~+10V) / current (0mA~+20mA) output¹⁾ Resolution: 12-bit Built-in RS-485 interface | | | | DVP04DA-H2 |
| | <ul style="list-style-type: none"> 4 points of analog voltage (-10V~+10V) / current (-20mA~+20mA) input 2 points of analog voltage (0V~+10V) / current (0mA~+20mA) output Resolution: 12-bit Built-in RS-485 interface | | | | DVP06XA-H2 |
| | <ul style="list-style-type: none"> 4 points of platinum RTD (Pt100, Pt1000, Ni100, Ni1000) sensor input¹⁾ / 0~300Ω or 0~3000Ω resistance input Resolution: 0.1°C Built-in RS-485 interface | | | | DVP04PT-H2 |
| | <ul style="list-style-type: none"> 4 points of thermocouple (J, K, R, S, T, E, N Type) sensor input¹⁾ / 0~150mV voltage input Resolution: 0.1°C Built-in RS-485 interface | | | | DVP04TC-H2 |
| | <ul style="list-style-type: none"> 8 points of thermocouple (J, K, R, S, T, E, N Type) sensor input¹⁾ / 0~150mV or ±150mV voltage input Resolution: 0.1°C Built-in RS-485 interface | | | | DVP08TC-H2 |
| | <ul style="list-style-type: none"> 4 channels of differential voltage (-10V~+10V) / current (-20mA~+20mA) input Resolution: 16-bit Built-in RS-485 interface | | | | DVP04AD-H3 |
| | <ul style="list-style-type: none"> 4 channels of voltage (-10V~+10V) / current (0~+20mA) output Resolution: 16-bit Built-in RS-485 interface | | | | DVP04DA-H3 |
| | <ul style="list-style-type: none"> 4 channels of differential voltage (-10V~+10V) / current (-20mA~+20mA) input 2 channels of voltage (-10V~+10V) / current (0~+20mA) output Resolution: 16-bit Built-in RS-485 interface | | | | DVP06XA-H3 |
| <p>¹⁾ 1. Digital/analog photocoupler isolation. No isolation among channels.</p> | | | | | |

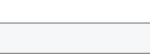
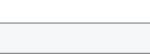


DVP-EH3 Series Extension Module/Function Card

| Product Name | Description | Model Name | Certificates |
|----------------------|--|------------|--------------|
| Positioning Module | Servo position control module (single axis, 200 kHz) | DVP01PU-H2 | |
| High-Speed Counter | High-speed counter module (1CH) | DVP01HC-H2 | |
| Communication Module | PROFIBUS DP slave communication module | DVPPF02-H2 | |
| | CANopen slave communication module | DVPCP02-H2 | |
| | DeviceNet slave communication module | DVPDT02-H2 | |
| Function Card | RS-232 port conversion (DVP-EH2: COM2; DVP-EH3: COM3) | DVP-F232 | |
| | RS-422 port conversion (DVP-EH2: COM2; DVP-EH3: COM3) | DVP-F422 | |
| | RS-485 port extension (COM3) (DVP-EH3 only) | DVP-F485 | |
| | <ul style="list-style-type: none"> 2 points of analog voltage (0~10V) / current (0~20mA) input Resolution: 12-bit | DVP-F2AD | |
| | <ul style="list-style-type: none"> 2 points of analog voltage (0~10V) / current (0~20mA) output Resolution: 12-bit | DVP-F2DA | |
| | Ethernet communication card (compatible with controllers built-in with 32 I/O and above) | DVP-FEN01 | |
| | | | |
| | | | |



DVP-S Series PLC

| Product Name | Power Supply | Output Method | Inputs | Outputs | Model Name | Certificates |
|--|--------------------|------------------|-----------------------------------|---------|-------------------------------|--|
| DVP-SV2 Series Functional Slim PLC | 24 V _{DC} | Relay | 16 | 12 | DVP28SV11R2 |   |
| | 24 V _{DC} | Transistor | 16 | 12 | DVP28SV11T2 | |
| | 24 V _{DC} | Transistor (PNP) | 16 | 12 | DVP28SV11S2 | |
| | 24 V _{DC} | Transistor | 10 (2AI) | 12 | DVP24SV11T2 | |
| Execution time of basic instructions | | | 0.24 µs | | | |
| DVP-SS2 Series Standard Slim PLC | 24 V _{DC} | Relay | 16 | 12 | DVP28SS211R |   |
| | 24 V _{DC} | Transistor | 16 | 12 | DVP28SS211T | |
| | 24 V _{DC} | Transistor (PNP) | 16 | 12 | DVP28SS211S ^{*1 New} | |
| | 24 V _{DC} | Relay | 8 | 6 | DVP14SS211R | |
| | 24 V _{DC} | Transistor | 8 | 6 | DVP14SS211T | |
| | 24 V _{DC} | Transistor (PNP) | 8 | 4 | DVP12SS211S | |
| DVP-SA2 Series Advanced Slim PLC | 24 V _{DC} | Relay | 16 | 12 | DVP28SA211R |   |
| | 24 V _{DC} | Transistor | 16 | 12 | DVP28SA211T | |
| | 24 V _{DC} | Transistor (PNP) | 16 | 12 | DVP28SA211S ^{*1 New} | |
| | 24 V _{DC} | Relay | 8 | 4 | DVP12SA211R | |
| | 24 V _{DC} | Transistor | 8 | 4 | DVP12SA211T | |
| DVP-SX2 Series Analog Slim PLC | 24 V _{DC} | Relay | 8 (4AI) | 6 (2AO) | DVP20SX211R |   |
| | 24 V _{DC} | Transistor | 8 (4AI) | 6 (2AO) | DVP20SX211T | |
| | 24 V _{DC} | Transistor (PNP) | 8 (4AI) | 6 (2AO) | DVP20SX211S | |
| Fastest execution time of basic instructions | | 0.35 µs | Execution time of MOV instruction | | 3.4 µs | |
| DVP-SE Series Network Type Slim PLC | 24 V _{DC} | Relay | 14 | 12 | DVP26SE11R |   |
| | 24 V _{DC} | Transistor | 14 | 12 | DVP26SE11T | |
| | 24 V _{DC} | Transistor (PNP) | 14 | 12 | DVP26SE11S ^{*1 New} | |
| | 24 V _{DC} | Relay | 8 | 4 | DVP12SE11R | |
| | 24 V _{DC} | Transistor | 8 | 4 | DVP12SE11T | |
| Fastest execution time of basic instructions | | 0.64 µs | Execution time of MOV instruction | | 2 µs | |
| DVP-SX Series Analog Slim PLC | 24 V _{DC} | Relay | 4 (2AI) | 2 (2AO) | DVP10SX11R |   |
| | 24 V _{DC} | Transistor | 4 (2AI) | 2 (2AO) | DVP10SX11T | |
| Fastest execution time of basic instructions | | 3.8 µs | Execution time of MOV instruction | | 5.04 µs | |

*1. Please contact our distributors for release date

DVP-S Series Digital/Analog Module

| Product name | Output Method | Inputs | Outputs | Model Name | Certificates |
|----------------------|--|--|------------|--|--|
| Digital Module | Relay | - | 6 | DVP06SN11R |   |
| | Relay | - | 8 | DVP08SN11R | |
| | Transistor | - | 8 | DVP08SN11T | |
| | Transistor | - | 16 | DVP16SN11T | |
| | Relay | 4 | 4 | DVP08SP11R | |
| | Transistor | 4 | 4 | DVP08SP11T | |
| | - | 8 | - | DVP08SM11N | |
| | - | 8 | - | DVP08SM10N | |
| | Transistor (PNP) | - | 8 | DVP08SN11TS | |
| | Digital switch | 8 | - | DVP08ST11N | |
| | Relay | 8 | 8 | DVP16SP11R | |
| | Transistor (PNP) | 4 | 4 | DVP08SP11TS | |
| | Transistor (NPN) | 8 | 8 | DVP16SP11T | |
| | Transistor (PNP) | 8 | 8 | DVP16SP11TS | |
| | Transistor (PNP) | - | 16 | DVP16SN11TS | |
| | - | 16 | - | DVP16SM11N | |
| | Transistor, MIL | - | 32 | DVP32SN11TN | |
| | MIL | 32 | - | DVP32SM11N | |
| Product Name | | | | | |
| Analog I/O Module | ▪ 4 points of analog input voltage (-10V ~ +10V) / current (-20 mA ~ +20 mA) ▪ Input resolution: 14-bit | ▪ Built-in RS-485 interface ▪ Differential input | DVP04AD-S2 |   | |
| | ▪ 4 points of analog output voltage (0V ~ +10V) / current (0 mA ~ +20 mA) | | | | |
| | ▪ Analog input+output module (6 points) | ▪ Output resolution: 12-bit ▪ Built-in RS-485 interface | DVP04DA-S2 | | |
| | ▪ 4 points of analog input voltage (-10V ~ +10V) / current (-20 mA ~ +20 mA) | | | | |
| | ▪ 2 points of analog output voltage (0V ~ +10V) / current (0 mA ~ +20 mA) | ▪ Input / output resolution: 12-bit ▪ Built-in RS-485 interface ▪ Differential input | DVP06XA-S2 | | |
| | | | | | |

Ordering Information

DVP-S Series Analog Module

| Product Name | Description | Model Name | Certificates |
|-------------------|---|--|---|
| Analog I/O Module | ▪ 4 points of analog input voltage (-10V ~ +10V) / current (-20 mA ~ +20 mA) ▪ Input resolution: 14-bit | ▪ Built-in RS-485 interface ▪ Single-ended input | DVP04AD-S |
| | ▪ 4 points of analog output voltage (0V ~ +10V) / current (0 mA ~ +20 mA) ▪ Output resolution: 12-bit | ▪ Built-in RS-485 interface | DVP04DA-S |
| | ▪ 2 points of analog output voltage (0V ~ +10V) / current (0 mA ~ +20 mA) ▪ Output resolution: 12-bit | ▪ Built-in RS-485 interface | DVP02DA-S |
| | ▪ 6 points of analog input voltage (-10V ~ +10V) / current (-20 mA ~ +20 mA) ▪ Input resolution: 14-bit | ▪ Built-in RS-485 interface | DVP06AD-S |
| | ▪ Analog input+output modules (6 points) ▪ 4 points of analog input voltage (-10V ~ +10V) / current (-20 mA ~ +20 mA) ▪ 2 points of analog output voltage (0V ~ +10V) / current (0 mA ~ +20 mA) | ▪ Input/output resolution: 12-bit ▪ Built-in RS-485 interface ▪ Single-ended input | DVP06XA-S |
| | | |   |

DVP-S Series Extension Module/High-Speed Module (Left-side)

| Product Name | Description | | Model Name | Certificates |
|--|---|--|------------------------------|---|
| High-Speed Analog I/O Module (Left-side) | ▪ 4 groups of analog input ^{*1} ▪ Signal range: 1 ~ 5V, 0 ~ 5V, -5 ~ 5V, 0 ~ 10V, -10 ~ 10V, 4 ~ 20 mA, 0 ~ 20 mA, -20 ~ 20 mA ▪ Resolution: 16-bit ▪ Single channel On/Off setup enhances entire conversion efficiency ▪ Conversion time: 250 µs / point ▪ Off-line alarm (1 ~ 5V, 4 ~ 20 mA) | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP04AD-SL |  |
| | ▪ 4 groups of analog output ^{*1} ▪ Signal range: 0 ~ 10V, -10 ~ 10V, 4 ~ 20 mA, 0 ~ 20 mA ▪ Resolution: 16-bit ▪ Offers single channel On/Off setup ▪ Conversion time: 250 µs / point | ▪ Measurable range: 0 ~ 80 mV/V ▪ Built-in I/O control: 2DI/4DO/1AO | DVP04DA-SL |  |
| High-Speed Load Cell Module (Left-side) | ▪ 1 set of load cell module ^{*1} ▪ Resolution: 24-bit for hardware(ADC), 32-bit for data output ▪ 1 set of load cell module ^{*1} ▪ Resolution: 24-bit for hardware(ADC), 32-bit for data output ▪ Connectable to 4-wire/6-wire load cell sensor | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP201LC-SL |  |
| | ▪ 2 sets of load cell module ^{*1} ▪ Resolution: 24-bit for hardware(ADC), 32-bit for data output | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP202LC-SL |  |
| | ▪ Supports 2 channels of load cell signal input ^{*1} ▪ Resolution: 20-bit for hardware(ADC), 16-bit for data output ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 6 mV/V | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP02LC-SL |  |
| | ▪ Supports 1 channel of load cell signal input ^{*1} ▪ Resolution: 20-bit for hardware(ADC), 32-bit for data output ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 6 mV/V | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP01LC-SL |  |
| | ▪ 6 points of platinum RTD (Pt100, Pt1000, Ni100, Ni1000) sensor input ▪ Resolution: 0.1 °C | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP06PT-S |  |
| | ▪ 4 points of platinum RTD (Pt100, Pt1000, Ni100, Ni1000) sensor input ^{*1} (Version 4.06 and above supports Pt1000, Ni100, Ni1000) ▪ Resolution: 0.1 °C ▪ Built-in RS-485 interface | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP04PT-S |  |
| Temperature Measurement Module | ▪ 4 points of thermocouple (J, K, R, S, T type) sensor input ^{*1} ▪ Resolution: 0.1 °C ▪ Built-in RS-485 interface | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP04TC-S |  |
| | ▪ 8 points of thermocouple (NTC) sensor input ^{*1} ▪ Resolution: 0.1 °C ▪ Built-in RS-485 interface | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP08NTC-S ^{*2 New} |  |
| | ▪ 2 points of universal analog input: 0 ~ 10V, 0 ~ 20 mA, 4 ~ 20 mA; Thermocouple: J, K, R, S, T, E, N, B, C, L, U, TXK, PLII; RTD: Pt100, JPt100, Pt1000, Cu50, Cu100, Ni100, Ni1000, LG-Ni1000 ▪ Resolution: analog 16-bit; Sensor: 0.1 °C ▪ 4 points of NPN transistor output: 24V _{DC} /300mA ▪ Output point: built-in PID program control/manual control | ▪ Connectable to 4-wire/6-wire load cell sensor ▪ Measurable range: 0 ~ 80 mV/V | DVP02TUN-S |  |
| | | | |  |

*1. Digital/analog photocoupler isolation. No isolation among channels.

*2. Please contact our distributors for release date

DVP-S Series Extension Module / High-Speed Module (Left-side)

| Product Name | Description | Model Name | Certificates |
|---------------------------------------|--|------------|--------------|
| Temperature Measurement Module | <ul style="list-style-type: none"> ▪ 2 points of universal analog input: 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA; Thermocouple: J, K, R, S, T, E, N, B, C, L, U, TXK, PLII; RTD: Pt100, JPt100, Pt1000, Cu50, Cu100, Ni100, Ni1000, LG-Ni1000 ▪ Resolution: analog 16-bit; Sensor: 0.1 °C ▪ 4 points of relay output: 24V_{DC}/3A ▪ Output point: built-in PID program control/manual control | DVP02TUR-S | |
| | <ul style="list-style-type: none"> ▪ 2 points of universal analog input: 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA; Thermocouple: J, K, R, S, T, E, N, B, C, L, U, TXK, PLII; RTD: Pt100, JPt100, Pt1000, Cu50, Cu100, Ni100, Ni1000, LG-Ni1000 ▪ Resolution: analog 16-bit; Sensor: 0.1 °C ▪ 2 points of analog output: 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA ▪ Output point: built-in PID program control/manual control | DVP02TUL-S | |

*1. Digital/analog photocoupler isolation. No isolation among channels.

DVP-S Series Extension Module / High-Speed Module (Left-side)

| Product Name | Description | Model Name | Certificates |
|--|---|--|--------------|
| Positioning Module | Servo position control module (single axis, 200 kHz) | DVP01PU-S | |
| Communication Module | DeviceNet slave communication module | DVPDT01-S | |
| | PROFIBUS DP slave communication module | DVPPF01-S | |
| Left-Side High-Speed Communication Module | Ethernet communication module, 10 / 100 Mbps | DVPEN01-SL | |
| | DeviceNet master communication module, 500 Kbps | DVPDNET-SL | |
| | CANopen master communication module, 1 Mbps | DVPCOPM-SL | |
| | PROFIBUS DP slave communication module , 12 Mbps | DVPPF02-SL | |
| | RS-485/RS-422, serial communication module, 460 Kbps | DVPSCM12-SL | |
| | BACnet MS / TP Slave communication module, 460 Kbps | DVPSCM52-SL | |
| Remote I/O Module | RS-485 remote I/O module, connectable to DVP-S series I/O modules | RTU-485 | |
| | Ethernet remote I/O module, connectable to DVP-S series I/O modules | RTU-EN01 | |
| | DeviceNet remote I/O module, connectable to DVP-S series I/O modules | RTU-DNET | |
| | PROFIBUS remote I/O module, connectable to DVP-S series I/O modules | RTU-PD01 | |
| | CANopen remote I/O module, connectable to DVP-S series I/O modules | RTU-CN01 ¹ <small>New</small> | |
| | EtherCAT remote I/O module, connectable to DVP-S series I/O modules | RTU-ECAT ¹ <small>New</small> | |
| Remote Temperature Control Module | <ul style="list-style-type: none"> ▪ 2 points of universal analog input: 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA; Thermocouple: J, K, R, S, T, E, N, B, C, L, U, TXK, PLII; RTD: Pt100, JPt100, Pt1000, Cu50, Cu100, Ni100, Ni1000, LG-Ni1000 ▪ Resolution: analog 16-bit; Sensor: 0.1 °C ▪ 4 points of NPN transistor output: 24V_{DC}/300mA ▪ Output point: built-in PID program control/manual control | DVP02TKN-S | |
| | <ul style="list-style-type: none"> ▪ 2 points of universal analog input: 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA; Thermocouple: J, K, R, S, T, E, N, B, C, L, U, TXK, PLII; RTD: Pt100, JPt100, Pt1000, Cu50, Cu100, Ni100, Ni1000, LG-Ni1000 ▪ Resolution: analog 16-bit; Sensor: 0.1 °C ▪ 4 points of relay output: 24V_{AC}/3A ▪ Output point: built-in PID program control/manual control | DVP02TKR-S | |
| | <ul style="list-style-type: none"> ▪ 2 points of universal analog input: 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA; Thermocouple: J, K, R, S, T, E, N, B, C, L, U, TXK, PLII; RTD: Pt100, JPt100, Pt1000, Cu50, Cu100, Ni100, Ni1000, LG-Ni1000 ▪ Resolution: analog 16-bit; Sensor: 0.1 °C ▪ 2 points of analog output: 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA ▪ Output point: built-in PID program control/manual control | DVP02TKL-S | |

*1. Please contact our distributors for release date

Communication Converter

| Product Name | Description | Model Name | Certificates |
|------------------|---|---|--------------|
| Converter | USB to RS-485 converter | IFD6500 | |
| | USB to CAN converter | IFD6503 | |
| | USB to RS-485 converter | IFD6530 | |
| | EtherNet/IP, Modbus TCP to RS-232, RS-485 converter | IFD9506 | |
| | DeviceNet to RS-232 / 485 converter | IFD9502 | |
| | CANopen to RS-232 / 485 converter | IFD9503 | |
| | RS-232 to RS-422 / 485 isolated converter | IFD8500-A | |
| | RS-485 to RS-422 isolated repeater | IFD8510-A | |
| | RS-422 / 485 to RS-232 addressable isolated converter | IFD8520 | |
| | Bluetooth (BLE) to RS-485 converter | IFD8540 ¹ <small>New</small> | |

*1. Please contact our distributors for release date

Ordering Information

DVP-PM Series

| Product Name | Power Supply | Output Method | Inputs | Outputs | Model Name | Certificates |
|--------------------------------------|------------------------|---|--------|-----------------------------------|-------------|--|
| Standard Motion Controller | 100~240V _{AC} | Differential | 16 | 16 | DVP10PM00M |   |
| | | (Built-in 4-axis of independent 1MHz pulse output) | | | | |
| Advanced Motion Controller | 100~240V _{AC} | Differential | 8 | 8 | DVP20PM00DT | |
| | | (Built-in 2-axis of independent 500 kHz pulse output) | | | DVP20PM00D | |
| | | (Built-in 3-axis of independent 500 kHz pulse output) | | | DVP20PM00M | |
| Extension Module | | Description | | | Model Name | |
| DVP-PM communication card | | Ethernet/CANopen communication card | | | DVP-FPMC | |
| Execution time of basic instructions | | 0.13 μs | | Execution time of MOV instruction | | 3.74 μs |

DVP-MC Series

| Product Name | Power Supply | Communication Protocol | Axes Controlled | Inputs | Outputs | Model Name | Certificates |
|------------------------------|--------------------|------------------------|-----------------|--------|---------|----------------------------------|--|
| Multi-axis Motion Controller | 24 V _{DC} | CANopen DS402 | 16 | 8 | 4 | DVP10MC11T |   |
| | | | 24 | 16 | 8 | DVP15MC11T <small>New</small> | |
| | | | 6 | 16 | 8 | DVP15MC11T-06 <small>New</small> | |
| | | EtherCAT | 24 | 16 | 8 | DVP50MC11T <small>New</small> |   |
| | | | 6 | 16 | 8 | DVP50MC11T-06 <small>New</small> | |
| | | | | | | | |

TP Series

| Product Name | Description | | | | | | | | | Model | Certificates |
|--------------|--|-------------|----|------------------|------------------|----|------------------|----|-------------|-----------------------------|--|
| TP02 | Resolution: 160 x 32, Serial COM ports: RS-232 & RS-485 | | | | | | | | | TP02G-AS1 |   |
| TP04 | Resolution: 128 x 64, Serial COM ports: RS-232 & RS-422/RS-485 | | | | | | | | | TP04G-AS2 | |
| | Resolution: 192 x 64, Serial COM ports: RS-232 & RS-422/RS-485 | | | | | | | | | TP04G-AL2 | |
| | Resolution: 192 x 64, Serial COM ports: RS-232 | | | | | | | | | TP04G-AL-C | |
| | Resolution: 192 x 64, Serial COM ports: RS-232 & RS-422/RS-485, 0 ~ 9 numeric keys available | | | | | | | | | TP04G-BL-C | |
| Product Name | Description | DI | DO | AI ^{*2} | AO ^{*2} | PT | AX ^{*1} | LC | Output Type | Model | Certificates |
| TP04P | Resolution: 192 x 64 Serial COM ports: USB & RS-485*2 | 4 (60Hz) | 4 | | | | | | Relay | TP04P-08TP1R |   |
| | | 8 | 8 | | | | | | Relay | TP04P-16TP1R | |
| | | 16 | 16 | | | | | | Relay | TP04P-32TP1R | |
| | | 8 | 8 | 4(V/I) | 2(V/I) | | | | Relay | TP04P-22XA1R | |
| | | 8 | 8 | 2(I) | 1(I) | 2 | | | Relay | TP04P-21EX1R | |
| | | 8 | 8 | | | | | | Transistor | TP04P-16TP1T | |
| | | 16 | 16 | | | | | | Transistor | TP04P-32TP1T | |
| | | 8 | 8 | 4(V/I) | 2(V/I) | | | | Transistor | TP04P-22XA1T | |
| | | 8 | 8 | 2(I) | 1(I) | 2 | | | Transistor | TP04P-21EX1T | |
| | | 9 | 16 | 4(V/I) | 2(V/I) 4(I) | | 2 | 1 | Transistor | TP04P-20EXL1T ^{*3} | |
| TP70P | Resolution: 800 x 400 Serial COM ports: USB & RS-485*2 | 8 | 8 | | | | | | Relay | TP70P-16TP1R |   |
| | | 16 | 16 | | | | | | Relay | TP70P-32TP1R | |
| | | 8 | 8 | 4(V/I) | 2(V/I) | | | | Relay | TP70P-22XA1R | |
| | | 8 | 8 | 2(I) | 1(I) | 2 | | | Relay | TP70P-21EX1R | |
| | | 8 | 8 | | | | | | Transistor | TP70P-16TP1T | |
| | | 16 | 16 | | | | | | Transistor | TP70P-32TP1T | |
| | | 8 | 8 | 4(V/I) | 2(V/I) | | | | Transistor | TP70P-22XA1T | |
| | | 8 | 8 | 2(I) | 1(I) | 2 | | | Transistor | TP70P-21EX1T | |
| | | 17 | 24 | | 4(I) | | 2 | 1 | Transistor | TP70P-211LC1T ^{*3} | |
| TP08 | Resolution: 240 x 128 / Serial COM ports: RS-232, RS-422 & RS-485 / 0~9 numeric numeric keypad | | | | | | | | | TP08G-BT2 | |

*1: Universal analog input (mA, V, RTD)

*2: V (Voltage), I (Current)

*3: USB & RS-485 are design with isolation

Software

| Product Name | Description | OS (Windows-based Software) |
|--------------------------|---|---|
| ISPSoft | PLC editing software for AH, AS and DVP Series (supports 5 programming languages: LD, FBD, SFC, ST, IL) | Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit) |
| WPLSoft | Programming software for DVP Series | Windows 98, Me, NT4.0, 2000, XP, Vista, Windows 7 (32-bit/64-bit) |
| TPEditor | Editing software for TP Series | Windows 98, Me, NT4.0, 2000, XP, Vista, Windows 7 (32-bit/64-bit) |
| PMSoft | Programming software for DVP-PM series | Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit) |
| DCISoft | Delta communication integration software | Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit) |
| DeviceNet Builder | DeviceNet configuration software | Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit) |
| CANopen Builder | CANopen configuration software | Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit) |
| NetView Builder | CAN bus message analysis software | Windows 2000, XP, Vista, Windows 7 (32-bit) |

Starter Kit

| Product Name | Model Name | Contents |
|------------------------------|------------|--|
| Delta PLC Starter Kit | UT-14SS2-A | DVP14SS211R (PLC), DOP-107BV (HMI) and accessory |
| | UT-12SE-A1 | DVP12SE11R (PLC), DOP-107EV (HMI) and accessory |

Industrial Power Supply

| Series | Power Supply | Inputs | Outputs | Power | Output Current | Model Name | Certificates |
|------------|--------------|-----------------------|-------------------|-------|----------------|------------|---|
| DVP | 1-phase | 85~264V _{AC} | 24V _{DC} | 24W | 1A | DVPPS01 |  |
| | | | | 48W | 2A | DVPPS02 | |
| | | | | 120W | 5A | DVPPS05 | |

*Note: For more ordering information, please refer to the catalogue for Delta Industrial Power Supply.

Accessories

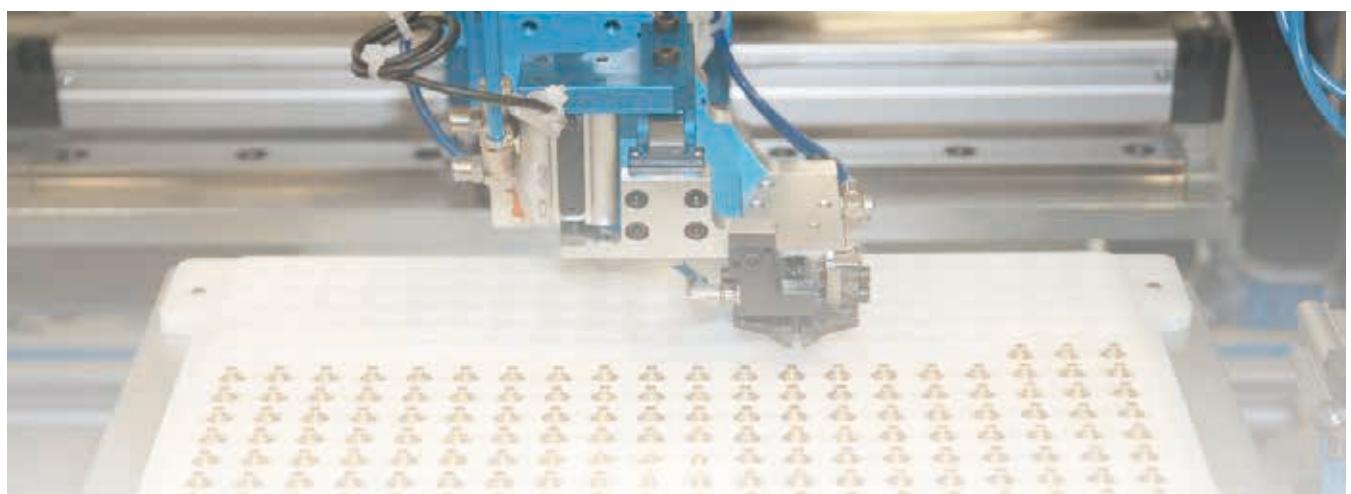
| Type | Model Name | Description | Specification | | Applicable Modules |
|---|---------------|--|---------------|---|--|
| | | | Length | Connector / Terminal Block | |
| PLC Programming and Serial Communication Cable | UC-PRG015-01A | Communication cable for PLC (mini USB) to PC | 1.5 m | PC (USB↔mini USB) PLC | DVP-SE/DVP-SX2/AH500 |
| | UC-PRG015-02A | Communication cable for TP (USB type) to PC | 1.5 m | PC (USB↔USB B type) TP | TP70P/TP04P / DOP |
| | UC-PRG020-12A | Communication cable for PLC (DB9 female / 8-pin mini-DIN male) to PC | 2 m | PC (DB9 female↔8-pin mini-DIN male) PLC | DVP/TP RS-232 |
| | UC-PRG030-01A | Communication cable for PLC (mini USB) to PC | 3 m | PC (USB↔mini USB) PLC | DVP-SE/SX2 AH500 |
| | UC-PRG030-02A | Communication cable for TP (USB B type) to PC | 3 m | PC (USB↔USB B type) TP | TP70P / TP04P / DOP |
| | UC-PRG030-10A | Communication cable for PLC / HMI / TP (DB9 female) to PC | 3 m | PC (DB9 female↔DB9 female) PLC/HMI/TP | PLC/HMI/TP (DB9 female) |
| | UC-PRG030-20A | Communication cable for PLC / HMI (RJ45) to PC | 3 m | PC (RJ45↔RJ45) PLC/HMI | DVP-SE DVPPEN02-L AHCPU5□-EN AH10EN-5A |
| | UC-MS010-02A | Communication cable for PLC (8-pin mini-DIN male) to PC | 1 m | PC (DB9 female↔8-pin mini-DIN male) PLC | DVP PLC RS-232 |
| | UC-MS020-01A | Communication cable for PLC (8-pin mini-DIN male) to PC | 2 m | PC (DB9 female↔8-pin mini-DIN male) PLC | |
| | UC-MS020-06A | Communication cable for PLC (8-pin mini-DIN male) to HMI | 2 m | HMI (DB9male↔8-pin mini-DIN male) PLC | |
| | UC-MS030-01A | Communication cable for PLC (8-pin mini-DIN male) to PC | 3 m | PC (DB9 female↔8-pin mini-DIN male) PLC | |
| | UC-MS030-06A | Communication cable for PLC (8-pin mini-DIN male) to HMI | 3 m | HMI (DB9male↔8-pin mini-DIN male) PLC | |

Ordering Information

Accessories

| Type | Model Name | Description | Specification | | Applicable Modules |
|---|--|--|------------------------------------|---|---|
| | | | Length | Connector / Terminal Block | |
| I/O External Terminal Module | UC-ET010-24A | I/O extension cable for connecting external terminal modules | 1m | PLC (MIL IDC40↔IDC40) external terminal modules | DVP32SM11N↔UB-10-ID32A DVP32SN11TN↔UB-10-OT32A |
| | UC-ET010-24B | I/O extension cable for connecting external terminal modules | 1m | PLC (MIL IDC40↔IDC40) external terminal modules (shielded wire) | DVP32SM11N↔UB-10-ID32A DVP32SN11TN↔UB-10-OT32A |
| | UC-ET010-24C | I/O extension cable for connecting external terminal modules | 1m | PLC (MIL IDC40↔IDC20x2) external terminal modules | DVP32SN11TN↔UB-10-OR16A |
| | UC-ET010-24D | I/O extension cable for connecting external terminal modules | 1m | PLC (MIL IDC40↔IDC20x2) external terminal modules (shielded wire) | DVP32SN11TN↔UB-10-OR16A |
| | UC-ET020-24B | I/O extension cable for connecting external terminal modules | 2m | PLC (MIL IDC40↔IDC20x2) external terminal modules (shielded wire) | DVP32SM11N↔UB-10-ID32A DVP32SN11TN↔UB-10-OT32A |
| | UC-ET020-24D | I/O extension cable for connecting external terminal modules | 2m | PLC (MIL IDC40↔IDC20x2) external terminal modules (shielded wire) | DVP32SN11TN↔UB-10-OR16A |
| | UC-ET030-24B | I/O extension cable for connecting external terminal modules | 3m | PLC (MIL IDC40 ↔ IDC40) external terminal modules (shielded wire) | DVP32SM11N↔UB-10-ID32A DVP32SN11TN↔UB-10-OT32A |
| | UC-ET030-24D | I/O extension cable for connecting external terminal modules | 3m | PLC (MIL IDC40 to IDC20x2) external terminal modules (shielded wire) | DVP32SN11TN↔UB-10-OR16A |
| Motion Control Cable / Industrial Communication Cable | UC-CMC003-01A | CANopen communication cable | 0.3m | RJ45 | DVPCOPM-SL DVP10MC11T DVP15MC11T DVP15MC11T-06 DVPCP02-H2 TAP-CN03 |
| | UC-CMC005-01A | | 0.5m | | |
| | UC-CMC010-01A | | 1m | | |
| | UC-CMC015-01A | | 1.5m | | |
| | UC-CMC020-01A | | 2m | | |
| | UC-CMC030-01A | | 3m | | |
| | UC-CMC050-01A | | 5m | | |
| | UC-CMC100-01A | | 10m | | |
| | UC-CMC200-01A | | 20m | | |
| | UC-EMC003-02A | EtherCAT communication cable (ETG approval) | 0.3m | RJ45 | DVP50MC11T DVP50MC11T-06 |
| | UC-EMC005-02A | | 0.5m | | |
| | UC-EMC010-02A | | 1m | | |
| | UC-EMC020-02A | | 2m | | |
| | UC-EMC050-02A | | 5m | | |
| | UC-EMC100-02A | | 10m | | |
| | UC-EMC200-02A | | 20m | | |
| Industrial Communication Cable | UC-EMC003-02B | EtherCAT communication cable | 0.3m | RJ45 | DVP50MC11T DVP50MC11T-06 |
| | UC-EMC005-02B | | 0.5m | | |
| | UC-EMC010-02B | | 1m | | |
| | UC-EMC020-02B | | 2m | | |
| External Terminal Module | UC-EMC030-02B | | 3m | | |
| | UC-EMC050-02B | | 5m | | |
| | UC-EMC100-02B | | 10m | | |
| | UC-EMC200-02B | | -- | | |
| Industrial Communication Cable | UC-DN01Z-01A ¹ | DeviceNet/CANopen communication cable (Trunk cable - thick) | On customer's demand (up to 305 m) | -- | DeviceNet/CANopen related models |
| | UC-DN01Z-02A ¹ | DeviceNet/CANopen communication cable (Drop cable - thin) | | -- | |
| External Terminal Module | UB-10-OR16A | external terminal module for DVP32SN output module | -- | 16-point relay output, 20-pin MIL | DVP32SN11TN |
| | UB-10-OT32A | external terminal module for DVP32SN output module | -- | 32-point transistor output, 40-pin MIL | DVP32SN11TN |
| | UB-10-ID32A | external terminal module for DVP32SM digital input module | -- | 32-point input, MIL | DVP32SM11TN |
| Connector | UN-03EN-04A | RJ45 connector | -- | -- | -- |
| Peripheral Accessory | Data backup memory card (DVP-EH3 only) | | | | DVP-512FM |
| | Data backup memory card (DVP-ES2 only) | | | | DVP-E64FM |
| | Data backup memory card (64k words) | | | | DVPPCC01 |
| | Data backup memory card (TP only) | | | | TP-PCC01 |
| | Communication cable for PC (9-pin & 25-pin D-Sub) and PLC, 1.5m | | | | DVPACAB215 |
| | Communication cable for PC (9-pin & 25-pin D-Sub) and PLC, 3m | | | | DVPACAB230 |
| | 4 types of RS-485 connectors | | | | ADP485-01 |
| | Connection cable for ADP485-01 and ASDA-A series servo | | | | ADPCAB03A |
| | Connection cable for ADP485-01 and ASDA-B series servo | | | | ADPCAB03B |
| | I/O extension cable for DVP-ES/EX Series, 0.3m | | | | DVPACAB403 |
| | Extension cable for DVP-EH series PLC and extension module, 0.7m | | | | DVPACAB4A07 |
| | DeviceNet/CANopen power distribution box | | | | TAP-CP01 |
| | DeviceNet/CANopen distribution box, 1 for 2 | | | | TAP-CN01 |
| | DeviceNet/CANopen distribution box, 2 for 3 | | | | TAP-CN02 |
| | DeviceNet/CANopen distribution box, 2 for 3 RJ45 | | | | TAP-CN03 |
| | 3.6V lithium battery (unchargeable) for DVP-EH/SX Series PLC | | | | DVPABT01 |
| | Terminal resistance for CANopen communication (RJ45) | | | | TAP-TR01 |
| | Programming cable for TP Series | | | | UCPRG030-10A |

Note 1: Not available in Taiwan





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