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*We reserve the right to change the information in this catalogue without prior notice.
The Perfect Small PLC Revolution!

Delta’s DVP series programmable logic controllers offer high-speed, stable and highly reliable applications in all kinds of industrial automation machines. In addition to fast logic operation, beatiful instructions and multiple function cards, the cost-effective DVP-PLC also supports various communication protocols, connecting Delta’s AC motor drive, servo, human machine interface and temperature controller through the industrial network into a complete “Delta Solution” for all users.

Contents

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVP-E Series MPU</td>
<td>3</td>
</tr>
<tr>
<td>DVP-S Series MPU</td>
<td>5</td>
</tr>
<tr>
<td>DVP-PM Series MPU</td>
<td>7</td>
</tr>
<tr>
<td>Industrial Fieldbus Solutions</td>
<td>11</td>
</tr>
<tr>
<td>TP Series Text Panel</td>
<td>13</td>
</tr>
<tr>
<td>DVP Series Extension Modules</td>
<td>17</td>
</tr>
<tr>
<td>Electrical Specifications &amp; Dimension</td>
<td>22</td>
</tr>
<tr>
<td>ISPSOft Programming Software</td>
<td>25</td>
</tr>
<tr>
<td>Ordering Information</td>
<td>31</td>
</tr>
</tbody>
</table>

DVP-EH2

Second Generation Standard Slim MPU

- MPU points: 14
- Max. I/O points: 480
- Program capacity: 16k steps
- Program execution speed: 0.35 μs (basic instruction), 3 μs (MOV)
- High-speed pulse output: 4 points of 10kHz pulse output
- Max. 8 points of high-speed input and external interruption input (20kHz×4 points, 10kHz×4 points)
- Built-in RS-232 and RS-485 ports, compatible with Modbus ASCII/RTU protocol. Can be master or slave.

DVP-SS2

Second Generation Standard Analog I/O MPU

- MPU points: 32 (80K/160K)
- Max. I/O points: 480 (left side extendable to high-speed modules)
- Program capacity: 16k steps
- Program execution speed: 0.35 μs (basic instruction), 3 μs (MOV)
- High-speed pulse output: 8 points of pulse output (100kHz/2, 10kHz/2)
- 8 points of high-speed pulse input and external interruption input (100kHz/2 points, 10kHz/2 points, 1 A/B phase input can reach 50kHz)
- Built-in 1 RS-232 and 2 RS-485 ports, compatible with Modbus ASCII/RTU protocol. Can be master or slave.

DVP-EH2

High Performance MPU

- MPU points: 160/320/480/640/840
- Max. I/O points: 512
- Program capacity: 16k steps
- Program execution speed: 0.24 μs (basic instruction)
- Built-in RS-232 and RS-485 ports, compatible with Modbus ASCII/RTU protocol
- Data register: 15k words
- File register: 10k words
- High-speed pulse output: 20- and 32-point models support 2 points of 200kHz pulse output, 49-point models support 4 points of 20kHz pulse output.
- Support 32,000 channels 20kHz high-speed counters
- DVP3EH2-DL model supports left-side high-speed module extension.

DVP-PM

Professional Motion Control MPU

DVP-PM series is the professional motion controller for 2-axis/S-axis synchronous motion. Able to achieve 500kHz differential output and compatible with G-code/M-code. DVP-PM can be defined as Delta’s brand new extendable multi-axis control system.

DVP-SX2

Second Generation Analog I/O MPU

- MPU points: 20
- Max. I/O points: 480 (left side extendable to high-speed modules)
- Program capacity: 16k steps
- Device D: 10k words
- Programmable of the existing DVP-SX series PLC
- Program execution speed: 0.35 μs (basic instruction), 3 μs (MOV)
- Built-in 1 mini USB for program upload/download and monitoring
- 4 points of high-speed pulse output (100kHz/2, 10kHz/2)
- 9 points of high-speed pulse input and external interruption input (10kHz/2, 10kHz/2)
- Built-in RS-232 and RS-485 ports, compatible with Modbus ASCII/RTU protocol. Can be master or slave.

DVP-SV

Left-Side High-Speed Extendable MPU

DVP-SV series is applicable in diverse applications, e.g., I/O sequential control, 4-axis high-speed motion control and many industrial networks. It supports left-side extension and is connectable to max. 16 modules (plus general extension modules).
DVP-E Series MPU

- Built-in 4 channels of analog input & 2 channels of analog output (EX2 model)
- Integrated communication
- Analog MPU of the highest cost-effectiveness
- High reliability
- Max. 256 I/O points extendable
- Supports PLC-Link (max. speed: 921kbps)

**Specification & Performance**
- MPU points: 16/20/32/40/48/64/80
- Max. I/O points: 272
- Program capacity: 16k steps
- COM port: Built-in 1 RS-232 & 2 RS-485 ports, compatible with Modbus ASCII/RTU protocol

**High-Speed Pulse Output**
Supports 2 points (Y0, Y2) of 10kHz & 2 points (Y1, Y3) of 10kHz high-speed pulse output

**Built-in High-Speed Counters**
- 2 points, 10kHz/1kHz, 1/2kHz, 1/3kHz, 1/4kHz
- *Refers to the max. counting range of a single counter.

**Built-in Analog I/O in EX2 Model**

- **Analog Input**
  - Points: 2, 4, 8, 16, 32
  - Resolution: 12 bits
  - Spec.: -20~20mA or 0~10V

- **Analog Output**
  - Points: 2, 4, 8, 16, 32
  - Resolution: 12 bits
  - Spec.: 0~20mA or 4~20mA

**Outstanding operation performance**
- Built-in large capacity for program & data storage
- Supports more than 203 application instructions

**Outstanding Operation Performance**
CPU + ASIC dual processors support floating point operations. The max. execution speed of basic instructions is able to reach 0.24μs.

**Flexible Function Extension Modules & Cards**
The multiple selections of extension modules and function cards provide analog I/O, temperature measurement, additional single-axis motion control, high-speed counting, the third serial COM port and many other functions.

**PLC-Link**
PLC-Link allows the user to link up max. 32 units to the network without having to install extra communication extension modules.

**Linear/Arc Interpolation Motion Control**
Supports the latest linear/arc interpolation instructions. Together with high-speed pulse output, DVP-EH2 is able to perform 2-axis synchronous control.

**Brand-New High-Speed Extension Modules**
The brand-new extension modules greatly shorten the data transmission time among the MPU and its extension modules as well as enhancing the efficiency of MPU program.
DVP-S Series MPU

**DVP-SS2**
- Suitable for basic applications
- Compact in size
- Extensible to 8 right-side modules

**DVP-SA2**
- Large program capacity to enhance operation efficiency
- Extensible to 8 right-side modules
- Extensible to left-side high-speed interfaces
- Supports PLC-Link (max. speed: 921kpps)

**DVP-SX2**
- Built-in 4 channels of analog input & 2 channels of analog output
- Extensible to 8 right-side modules
- Extensible to left-side high-speed interfaces
- Supports PLC-Link (max. speed: 921kpps)

**DVP-SV**
- Outstanding operation efficiency
- Large capacity for programming
- Extensible to left-side high-speed interfaces
- Supports linear/arc interpolation

**Specification & Performance**
- **DVP-SA2**
  - MPU points: 12 (8DI + 4DO)
  - Max. I/O points: 492 (12 + 480)
  - Program capacity: 16k steps

- **DVP-SX2**
  - MPU points: 20 (8DI/8DO, 4AI/2AO)
  - Max. I/O points: 694 (14 + 480)
  - Program capacity: 16k steps

**High-Speed Pulse Output**
- **DVP-SA2**
  - Supports 4 points (Y0 ~ Y3) of independent high-speed (max. 10kHz) pulse output

- **DVP-SX2**
  - Supports 2 points (Y0, Y2) of 100kHz and 2 points (Y1, Y3) of 10kHz independent high-speed pulse output.

**Supports PID Auto-tuning**
- DVP-SS2 saves parameters automatically after the PID auto temperature tuning is completed.

**Built-in High-Speed Counters**
- **DVP-SA2**
  - 1-phase 1
  - Points: 1
  - Bandwidth: 10kHz
  - Points: 2
  - Bandwidth: 2kHz

- **DVP-SX2**
  - 1-phase 1
  - Points: 2
  - Bandwidth: 1kHz
  - Points: 2
  - Bandwidth: 1kHz

**Built-in Analog I/O**
- **DVP-SX2**
  - Analog Input
  - Points: 4
  - Resolution: 12-bit
  - Spec: ±20mA or ±0–±10V

DVP-PM Series MPU

- Supports 3-axis linear/arc interpolation
- Max. differential output frequency: 500kHz
- G-code / M-code compatible

**Specification & Performance**

- MPU I/O points: 16
- Max. I/O points: 512
- Program capacity: 64k steps
- COM port: Built-in RS-232 & RS-485 ports, compatible with Modbus/ASCII/RTU protocol
- Data register: 10k words
- File register: 10k words
- Electronic cam: 2,048 points

**500kHz Differential Output**

- Built-in 2 groups of A/B phase differential signal output
- X axis pulse output: (FP0+, FP0-), (RP0+, RP0-)
- Y axis pulse output: (FP1+, FP1-), (RP1+, RP1-)

**Supports MPG & Multiple External Signals Input**

Direct external signal input is able to achieve real-time feedback and motion control.

<table>
<thead>
<tr>
<th>Model name</th>
<th>Spec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVP20PM00D</td>
<td>2 axes</td>
</tr>
<tr>
<td>DVP20PM00M</td>
<td>3 axes</td>
</tr>
</tbody>
</table>

| Output power | Input points | Relay output |

- DVP-PM can be used as a PLC MPU as well as an extension module. It is compatible with all EH2 series extension modules.

**DVP20PM00D/M Electronic Cam**

- Software offers cam editing function
- Cam curve: 2,048 points
- Able to define 3 cams and dynamically modify the curve
- Applicable in winding, flying shear and other cam controls

**3-Axis Linear/Arc/Helical Interpolation**

The handy cam software compiles CAD file into G-code and uploads it into DVP-PM for executing complicated 2-axis linear/arc interpolation in for example CNC machines.

**Motion Control MPU, as well as Extension Module**

Apart from being a motion control MPU operating independently, DVP-PM can further be the extension module for EH series MPU. The user has to pre-plan the motion schedule and upload it to DVP-PM (as slave), and EH series MPU will only need to give "run" and "stop" commands. As an extension module, DVP-PM works independently and will not affect the scan time of the MPU.

**Compatible with Extension Modules of EH2 Series MPU**

DVP-PM offers flexible applications and is compatible with extension modules of EH series MPU.

**Function Cards for DVP-PM**

<table>
<thead>
<tr>
<th>Model name</th>
<th>Spec.</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM-PGC21</td>
<td>Data backup memory card</td>
<td>Acts read/write program</td>
</tr>
<tr>
<td>DVP-FMC</td>
<td>Interface/Communication card</td>
<td>1. Complies with CANopen/DESI-14 protocol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Supports CANopen/DESI-14 synchron axes,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Provides high-speed upload/download of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enhanced program.</td>
</tr>
</tbody>
</table>

**Can be MPU or Extension Module**

DVP-PM can be used as a PLC MPU as well as an extension module. It is compatible with all EH2 series extension modules.

**G-Code Compatible**

G00 x10 y10
G04 x20 y20 f10

Drawing a graphic → Converting to G-code → Downloading to DVP-PM

The graphic is converted into G-code and downloaded to DVP-PM before being drawn.

**DVP-PM series motion controller supports G-code, electronic cam, arc interpolation between any 2-axis, linear interpolation among any 3-axis and many other complex motion controls.**
Applications of DVP-PM

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

High-Speed Cutting Machine
Average PLC cutting motion is limited by operation speed, poor synchronization, large calculation amount and long CPU processing time, therefore resulting in disproportionate cutting result and affecting the quality of end products. The basic demands, however, can be fulfilled under low speed whereas rough surface and low quality appear together with high speed. The electronic cam function offered by DVP-PM is able to generate dynamic cam curve for rotary shear to ensure precise cutting results.

Digital Board Cutting Machine
Conventional PLC finishes cutting through the use of interruption, together with big following error. Now the rotary shear function built in DVP-PM is able to complete all kinds of demands, e.g. synchronous conveyance and cutting speed, to ensure precise cutting results.

CNC Lathe
DVP-PM controls multi-axis motion, 2-axis complete the motion by linear or arc interpolation, and other 2 work independently, controlling the independent or synchronous ascending/descending of the vertical axis on 2 sides.

PMSoft
The programming software for G-code editing, motion trajectory simulation, positioning route instruction and electronic cam establishment.

Variable Declaration
Separate from the program. The corresponding physical ID point of the variable is defined only after the program is entered. The user does not need to modify the program.

Function Block
A complete function can be divided into multiple function blocks. A function block can be used repeatedly. The importance function makes the programming more convenient.

Full Monitoring & Simulation
The "Program monitoring" and "Simulate monitoring" allow the user to keep track of the operation of program. The simulator can be connected to human machine interface simulator.

Motion Network Function Block
PLC Open Function Block function

Electronic Cam
Electronic cam edition
Delta Industrial Automation Solutions

Delta industrial automation products offer stable, fast and accurate solutions through industrial networks.

DMCNET

Delta DMCNET offer 10M bps communication speed, constructing a real-time control system which supports multi-axis synchronous motion. The system can be connected to servo motors, remote digital or analog I/O modules, step motors, DD motors, linear motors, MPG modules, and more.

DeviceNet

Delta DeviceNet products support interconnections among products of different brands and wire-saving network topology. The 500k bps stable and noise resistant fieldbus data transmission is suitable for harsh industrial sites.

PROFIBUS

Delta PROFIBUS products support 12M bps communication speed and are suitable for distributed automated industrial control networks.

Modbus / RS-485

Delta Modbus serial products integrate easily with devices of other brands, e.g., the communication among RS-232, RS-422, RS-485 and custom-defined formats, bringing forth very flexible on-site applications.

CANopen

Delta CANopen products support CANopen DS301 and DSP402 protocols, able to achieve multi-axis, high-speed and complex motion control with max. speed 1M bps.
TP Series Text Panel

**TP04G-AL2**
- 4.1” STN LCD
- User-defined function keys available
- Supports RS-232/RS-422/RS-485 communication ports (TP04G-AL2)
- User-defined boot screen available
- Supports Modbus Slave mode

**TP02G-AS1**
- STN LCD size: 72 x 32mm (TP02 series), 3” (TP04 series)
- Resolution: 160 x 32 dots (TP02 series), 128 x 64 dots (TP04 series)
- TP02 series provides 16 user-defined function keys
- TP04 series provides 12 user-defined function keys
- TP02 series supports RS-232 and RS-485 COM ports
- TP04 series supports RS-232 and RS-485/RS-422 COM ports
- Dimensions: 4.1” (101.6 x 35.24mm)
- Resolution: 192 x 64
- Display color: Monochrome
- Flash Memory: 256k bytes
- SRAM: 32k bytes
- Function keys: 10 function keys
- Password: Available
- Recipe function: Available
- Real-time clock: Available
- Serial COM port: RS-232 & RS-422/485
- Editing software: TPEditor

**TP04G-AS2**
- STN LCD size: 72 x 32mm (TP02 series), 3” (TP04 series)
- Resolution: 160 x 32 dots (TP02 series), 128 x 64 dots (TP04 series)
- TP02 series provides 16 user-defined function keys
- TP04 series provides 12 user-defined function keys
- TP02 series supports RS-232 and RS-485 COM ports
- TP04 series supports RS-232 and RS-485/RS-422 COM ports
- Dimensions: 4.1” (101.6 x 35.24mm)
- Resolution: 192 x 64
- Display color: Monochrome
- Flash Memory: 256k bytes
- SRAM: 32k bytes
- Function keys: 10 function keys
- Password: Available
- Recipe function: Available
- Real-time clock: Available
- Serial COM port: RS-232 & RS-485
- Editing software: TPEditor

**TP04G-BL-C**
- 4.1” STN LCD
- 0-9 numeric keys and user-defined function keys available
- Built-in RS-232 Modbus ASCII/RTU mode
- User-defined boot screen available
- Supports Modbus slave mode
- Dimensions: 4.1” (101.6 x 35.24mm)
- Resolution: 192 x 64
- Display color: Monochrome
- Flash Memory: 256k bytes
- SRAM: 32k bytes
- Function keys: 16 function keys
- Password: Available
- Recipe function: Available
- Real-time clock: Available
- Serial COM port: RS-232 & RS-485
- Editing software: TPEditor

**TP08G-BT2**
- 3.8” STN LCD
- Resolution: 240 x 128 dots
- Built-in 1,024kB flash memory
- 24 user-defined function keys available
- Built-in RS-232 and RS-485/RS-422 COM ports
- Supports recipe and macro functions
- Supports Modbus slave mode
- Dimensions: 3.8” (93mm x 41mm)
- Resolution: 160 x 80/240 x 128
- Display color: Monochrome
- Flash Memory: 1M bytes
- SRAM: 64k bytes
- Function keys: 24 function keys
- Password: Available
- Recipe function: Available
- Real-time clock: Available
- Serial COM port: RS-232 & RS-485
- Editing software: TPEditor
# Hardware Specifications

<table>
<thead>
<tr>
<th>Model name</th>
<th>TP20G-A51</th>
<th>TP20G-A52</th>
<th>TP20G-BT2</th>
<th>TP404G-AL-C</th>
<th>TP404G-AL2</th>
<th>TP404G-BL-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display systems</td>
<td>STN LCD</td>
<td>STN LCD</td>
<td>STN LCD</td>
<td>STN LCD</td>
<td>STN LCD</td>
<td>STN LCD</td>
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<tr>
<td>Screen type</td>
<td>STN LCD</td>
<td>STN LCD</td>
<td>STN LCD</td>
<td>STN LCD</td>
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<td>STN LCD</td>
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<tr>
<td>Display color</td>
<td>Monochrome</td>
<td>Monochrome</td>
<td>Monochrome</td>
<td>Monochrome</td>
<td>Monochrome</td>
<td>Monochrome</td>
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<tr>
<td>Resolution</td>
<td>160 x 32</td>
<td>128 x 64</td>
<td>240 x 128</td>
<td>192 x 64</td>
<td>240 x 128</td>
<td>192 x 64</td>
</tr>
<tr>
<td>Backlight</td>
<td>72 x 22mm</td>
<td>72 x 22mm</td>
<td>72 x 22mm</td>
<td>72 x 22mm</td>
<td>72 x 22mm</td>
<td>72 x 22mm</td>
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<tr>
<td>Display range</td>
<td>3.5&quot;(83 x 32mm)</td>
<td>3.5&quot;(83 x 32mm)</td>
<td>3.5&quot;(83 x 32mm)</td>
<td>3.5&quot;(83 x 32mm)</td>
<td>3.5&quot;(83 x 32mm)</td>
<td>3.5&quot;(83 x 32mm)</td>
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<tr>
<td>Flash memory</td>
<td>256k byte</td>
<td>1M byte</td>
<td>256k byte</td>
<td>1M byte</td>
<td>256k byte</td>
<td>256k byte</td>
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<td>Extension interface</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Real-time clock</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Auxiliary keys</td>
<td>6 7 12 5 6 7</td>
<td>6 7 12 5 6 7</td>
<td>6 7 12 5 6 7</td>
<td>6 7 12 5 6 7</td>
<td>6 7 12 5 6 7</td>
<td>6 7 12 5 6 7</td>
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<tr>
<td>Function keys</td>
<td>10 5 12 5 10</td>
<td>10 5 12 5 10</td>
<td>10 5 12 5 10</td>
<td>10 5 12 5 10</td>
<td>10 5 12 5 10</td>
<td>10 5 12 5 10</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>DC:24V (10% ~ 25%)</td>
<td>DC:24V (10% ~ 25%)</td>
<td>DC:24V (10% ~ 25%)</td>
<td>DC:24V (10% ~ 25%)</td>
<td>DC:24V (10% ~ 25%)</td>
<td>DC:24V (10% ~ 25%)</td>
</tr>
<tr>
<td>Backup battery</td>
<td>3.7V lithium battery CR2032 x 1 / battery life: 5 years</td>
<td>3.7V lithium battery CR2032 x 1 / battery life: 5 years</td>
<td>3.7V lithium battery CR2032 x 1 / battery life: 5 years</td>
<td>3.7V lithium battery CR2032 x 1 / battery life: 5 years</td>
<td>3.7V lithium battery CR2032 x 1 / battery life: 5 years</td>
<td>3.7V lithium battery CR2032 x 1 / battery life: 5 years</td>
</tr>
<tr>
<td>Buzzer</td>
<td>85dB</td>
<td>85dB</td>
<td>85dB</td>
<td>85dB</td>
<td>85dB</td>
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<tr>
<td>Cooling method</td>
<td>Natural air circulation</td>
<td>Natural air circulation</td>
<td>Natural air circulation</td>
<td>Natural air circulation</td>
<td>Natural air circulation</td>
<td>Natural air circulation</td>
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<td>Operating temperature</td>
<td>0°C ~ 50°C</td>
<td>0°C ~ 50°C</td>
<td>0°C ~ 50°C</td>
<td>0°C ~ 50°C</td>
<td>0°C ~ 50°C</td>
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<tr>
<td>Storage temperature</td>
<td>-20°C ~ 80°C</td>
<td>-20°C ~ 80°C</td>
<td>-20°C ~ 80°C</td>
<td>-20°C ~ 80°C</td>
<td>-20°C ~ 80°C</td>
<td>-20°C ~ 80°C</td>
</tr>
<tr>
<td>Operating humidity</td>
<td>10% ~ 90% RH (0 ~ 40°C)</td>
<td>10% ~ 90% RH (0 ~ 40°C)</td>
<td>10% ~ 90% RH (0 ~ 40°C)</td>
<td>10% ~ 90% RH (0 ~ 40°C)</td>
<td>10% ~ 90% RH (0 ~ 40°C)</td>
<td>10% ~ 90% RH (0 ~ 40°C)</td>
</tr>
<tr>
<td>Vibration</td>
<td>IEC61131-2, IEC 68-2-6 (TEST Fe)</td>
<td>IEC61131-2, IEC 68-2-6 (TEST Fe)</td>
<td>IEC61131-2, IEC 68-2-6 (TEST Fe)</td>
<td>IEC61131-2, IEC 68-2-6 (TEST Fe)</td>
<td>IEC61131-2, IEC 68-2-6 (TEST Fe)</td>
<td>IEC61131-2, IEC 68-2-6 (TEST Fe)</td>
</tr>
<tr>
<td>Shock</td>
<td>IEC61131-2, IEC 68-2-7 (TEST Fa)</td>
<td>IEC61131-2, IEC 68-2-7 (TEST Fa)</td>
<td>IEC61131-2, IEC 68-2-7 (TEST Fa)</td>
<td>IEC61131-2, IEC 68-2-7 (TEST Fa)</td>
<td>IEC61131-2, IEC 68-2-7 (TEST Fa)</td>
<td>IEC61131-2, IEC 68-2-7 (TEST Fa)</td>
</tr>
<tr>
<td>Radiated emission</td>
<td>CISPR11, Class A</td>
<td>CISPR11, Class A</td>
<td>CISPR11, Class A</td>
<td>CISPR11, Class A</td>
<td>CISPR11, Class A</td>
<td>CISPR11, Class A</td>
</tr>
<tr>
<td>Frequency: 50~200MHz, Limits: 45dB uV/m</td>
<td>Frequency: 50~200MHz, Limits: 45dB uV/m</td>
<td>Frequency: 50~200MHz, Limits: 45dB uV/m</td>
<td>Frequency: 50~200MHz, Limits: 45dB uV/m</td>
<td>Frequency: 50~200MHz, Limits: 45dB uV/m</td>
<td>Frequency: 50~200MHz, Limits: 45dB uV/m</td>
<td>Frequency: 50~200MHz, Limits: 45dB uV/m</td>
</tr>
<tr>
<td>Radiated electromagnetic field</td>
<td>EN61000-4-3, Frequency: 60~200MHz, Limits: 10V/m</td>
<td>EN61000-4-3, Frequency: 60~200MHz, Limits: 10V/m</td>
<td>EN61000-4-3, Frequency: 60~200MHz, Limits: 10V/m</td>
<td>EN61000-4-3, Frequency: 60~200MHz, Limits: 10V/m</td>
<td>EN61000-4-3, Frequency: 60~200MHz, Limits: 10V/m</td>
<td>EN61000-4-3, Frequency: 60~200MHz, Limits: 10V/m</td>
</tr>
<tr>
<td>Electrostatic discharge</td>
<td>EN61000-4-2, Air Discharge: 8KV, Contact Discharge: 4KV</td>
<td>EN61000-4-2, Air Discharge: 8KV, Contact Discharge: 4KV</td>
<td>EN61000-4-2, Air Discharge: 8KV, Contact Discharge: 4KV</td>
<td>EN61000-4-2, Air Discharge: 8KV, Contact Discharge: 4KV</td>
<td>EN61000-4-2, Air Discharge: 8KV, Contact Discharge: 4KV</td>
<td>EN61000-4-2, Air Discharge: 8KV, Contact Discharge: 4KV</td>
</tr>
<tr>
<td>Dimensions (WxH x D x H x D)</td>
<td>147 x 97 x 35.5</td>
<td>147 x 97 x 35.5</td>
<td>147 x 97 x 35.5</td>
<td>147 x 97 x 35.5</td>
<td>147 x 97 x 35.5</td>
<td>147 x 97 x 35.5</td>
</tr>
<tr>
<td>Panel output</td>
<td>136 x 85</td>
<td>136 x 85</td>
<td>136 x 85</td>
<td>136 x 85</td>
<td>136 x 85</td>
<td>136 x 85</td>
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<tr>
<td>Weight</td>
<td>245g</td>
<td>245g</td>
<td>245g</td>
<td>245g</td>
<td>245g</td>
<td>245g</td>
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<tr>
<td>Safety approvals</td>
<td>IP65/UL NEMA4 &amp; CE, UL Type 4 Indoor</td>
<td>IP65/UL NEMA4 &amp; CE, UL Type 4 Indoor</td>
<td>IP65/UL NEMA4 &amp; CE, UL Type 4 Indoor</td>
<td>IP65/UL NEMA4 &amp; CE, UL Type 4 Indoor</td>
<td>IP65/UL NEMA4 &amp; CE, UL Type 4 Indoor</td>
<td>IP65/UL NEMA4 &amp; CE, UL Type 4 Indoor</td>
</tr>
</tbody>
</table>

## Product Outline & Dimensions

**TP20G-A51**
- Front panel
- Right side view
- Top view
- Bottom view
- Unit mm

**TP040G-A52**
- Front panel
- Right side view
- Top view
- Bottom view
- Unit mm

**TP080G-BT2**
- Front panel
- Right side view
- Top view
- Bottom view
- Unit mm

**TP040G-BL-C**
- Front panel
- Right side view
- Top view
- Bottom view
- Unit mm

**TP040G-AL/TP040G-AL2**
- Front panel
- Right side view
- Top view
- Bottom view
- Unit mm
Extension Modules

Small PLC with the Strongest Operation Efficiency!

- Max. 512 I/O points
- 200kHz high-speed pulse output
- Brand-new high-speed extension modules
- Supports linear/arc interpolation
- L-type supports left-side extension

**Function Cards**

- Convert RS-485 into RS-232/422 for COM2
  - DVP-F232
  - DVP-F422
- Add additional 3rd COM port
  - DVP-F232S
  - DVP-F485S
- Analog I/O
  - DVP-F20A
  - DVP-F2AD
- Digital Input Point Extension
  - DVP-F4IP
- Dip Switch Input
  - DVP-FBD
- Transistor Output
  - DVP-F2OT
- Analog Input
  - DVP-FSVR
- Frequency Measurement Card
  - DVP-F2FR

**Digital I/O Modules**

- Input Point Extension
  - DVP08H/M11N
  - DVP16H/M11N
- Output Point Extension
  - DVP32H/M00N/R
  - DVP32H/M00R/T
- Input/Output Point Extension
  - DVP38H/M01N/R
  - DVP16H/M01R/T
  - DVP32H/M00R/T
  - DVP48H/M00R/T

**Analog I/O Modules**

- Analog Input
  - DVP04A-HZ
  - V: 14-bit
  - I: 13-bit
- Analog Output
  - DVP04A-H2
  - V: 12-bit
  - I: 12-bit
- Analog Input/Output
  - DVP06X-AZ
  - Input 4CH / Output 2CH
  - V: 12-bit
  - I: 11-bit
- Temperature Measurement
  - Sensor: Pt100
  - DVP04PT-H2
- Motion Control
  - Single-Axis Positioning
  - DVP01FU-H2
- High-Speed Counter
  - DVP01HC-H2

**Accessories**

- Data Backup Card
  - DVP-256FM
  - (for special purpose)
- Data Transmission Cable
  - DVPACASA20
  - (for general purpose)
- Handheld Programming Panel
  - DVP-1PP
- Extension Cable Connector for EH/P9M Series
  - DVPACABM/14
- Connector for MPU & Extension Module
  - DVPACABM/09, 03m (DVPACABM/18, 1.8m)

*AC power supply
Input points
Output points
Relay output
Translator output
Differential output

*Supports left-side high-speed extension.

For more detailed specifications, visit http://www.data.com/wb/title/electronics/orr-all-user-manuals-of-DVP-PLC.

*Contact your sales representative for the official launch date of the left-side high-speed extension modules.
Extension Modules

The Most Cost-Effective Solution to Sequential Control!

DVP-ES2/EX2
- 256 / 238 points
- 100kHz pulse output
- Analog input/output

DVP-SS2
2nd-Generation Slim Standard MPU

DVP-SX2
2nd-Generation Slim Analog I/O MPU

DVP-SA2
2nd-Generation Slim Advanced MPU

DVP-SV
Functional Slim Type MPU

---

Models:

- **DVP16ES200R**
  - Spec.: 4AI/2AO
  - Input: 16 points
  - Output: 16 points

- **DVP16ES200T**
  - Spec.: 4AI/2AO
  - Input: 16 points
  - Output: 16 points

- **DVP24ES200R**
  - Spec.: 4AI/2AO
  - Input: 24 points
  - Output: 24 points

- **DVP24ES200T**
  - Spec.: 4AI/2AO
  - Input: 24 points
  - Output: 24 points

- **DVP32ES200R**
  - Spec.: 4AI/2AO
  - Input: 32 points
  - Output: 32 points

- **DVP32ES200T**
  - Spec.: 4AI/2AO
  - Input: 32 points
  - Output: 32 points

- **DVP40ES200R**
  - Spec.: 4AI/2AO
  - Input: 40 points
  - Output: 40 points

- **DVP40ES200T**
  - Spec.: 4AI/2AO
  - Input: 40 points
  - Output: 40 points

- **DVP50ES200R**
  - Spec.: 4AI/2AO
  - Input: 50 points
  - Output: 50 points

- **DVP50ES200T**
  - Spec.: 4AI/2AO
  - Input: 50 points
  - Output: 50 points

- **DVP60ES200R**
  - Spec.: 4AI/2AO
  - Input: 60 points
  - Output: 60 points

- **DVP60ES200T**
  - Spec.: 4AI/2AO
  - Input: 60 points
  - Output: 60 points

---

Models:

- **DVP14SS211R**
  - Spec.: 4AI/2AO
  - Input: 14 points
  - Output: 14 points
  - Relay output
  - DC power supply
  - Translator output

- **DVP14SS211T**
  - Spec.: 4AI/2AO
  - Input: 14 points
  - Output: 14 points
  - Relay output
  - DC power supply
  - Translator output

- **DVP20SX211R**
  - Spec.: 4AI/2AO
  - Input: 20 points
  - Output: 20 points
  - Relay output
  - DC power supply
  - Translator output

- **DVP20SX211S**
  - Spec.: 4AI/2AO
  - Input: 20 points
  - Output: 20 points
  - Relay output
  - DC power supply
  - Translator output

- **DVP12SA211R**
  - Spec.: 4AI/2AO
  - Input: 12 points
  - Output: 12 points
  - Relay output
  - DC power supply
  - Translator output

- **DVP12SA211T**
  - Spec.: 4AI/2AO
  - Input: 12 points
  - Output: 12 points
  - Relay output
  - DC power supply
  - Translator output

- **DVP28SV11R**
  - Spec.: 4AI/2AO
  - Input: 28 points
  - Output: 28 points
  - Relay output
  - DC power supply
  - Translator output

- **DVP28SV11T**
  - Spec.: 4AI/2AO
  - Input: 28 points
  - Output: 28 points
  - Relay output
  - DC power supply
  - Translator output

---

**Temperature Measurement Modules**
- **DVP04PT-E2**
- **DVP04TC-E2**
Extension Modules

General Extension Modules
- Communication Modules
  - DeviceNet Master DVPDNET-SL
  - Ethernet DVPEN01-SL
  - CANopen Master DVP COPM-SL
- I/O Point Extension
  - Pin Header Input DVP32SM11N
  - Pin Header Output DVP32SN11T/N
  - Output Point Extension DVP08SM11N
  - Output Point Extension DVP08SN11R/T
  - Output Point Extension DVP16SF11R/T
  - Output Point Extension DVP16SF11T(S/PNP)
- Analog Function Extension
  - Analog Input DVP04AD-SL
  - Analog Output DVP04DA-SL
- Digital Switch DVP08ST11N

Temperature Measurement
- Sensor: Pt100 DVP04PT-S
- Sensor: J, K, R, S, T type thermocouple DVP04TC-S

Motion Control
- Single-Axis Positioning DVP01PT-S

Communication Modules
- PROFIBUS Slave DVPFP01-S
- DeviceNet Slave DVPD101-S

Power Supply Modules
- DVP08PS01
- DVP08PS02

Electrical Specifications

**AC**
- Power supply voltage: 100 ~ 240VAC (-15% ~ 10%), 50/60Hz ±5%
- Fuse capacity: 2A/250VAC
- Spike voltage durability: 1.5,000VAC (Primary-secondary), 1,500VAC (Primary-PE), 500VAC (Secondary-PE)
- Insulation impedance: >5MΩ (all I/O points to ground: 500VDC)
- Noise immunity: ESD: 8kV Air Discharge, LFI: Power Line: ±1kV Digital I/O : 1kV Analog & Communication I/O : 1kV<br>RS: 20MHz ±1GHz - 15V/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: -20°C ~ 70°C (temperature): 5% ~ 95% (humidity), Operation: 0°C ~ 55°C (temperature), 5% ~ 95% (humidity), Pollution degree 2

**DC**
- Power supply voltage: 24VDC (~15% ~ 20%)
- Fuse capacity: 2A/250VAC
- Spike voltage durability: 2A/250VAC : 5VDC, 8A/250VDC
- Insulation impedance: >5MΩ (all I/O points to ground: 500VDC)
- Noise immunity: ESD: 8kV Air Discharge, LFI: Power Line: ±1kV Digital I/O : 1kV Analog & Communication I/O : 1kV<br>RS: 20MHz ±1GHz - 15V/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: -20°C ~ 70°C (temperature): 5% ~ 95% (humidity), Operation: 0°C ~ 55°C (temperature), 5% ~ 95% (humidity), Pollution degree 2

**Input Point Specification**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>10kHz</th>
<th>20kHz</th>
<th>100kHz</th>
<th>200kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input signal frequency</td>
<td>10kHz</td>
<td>20kHz</td>
<td>100kHz</td>
<td>200kHz</td>
</tr>
<tr>
<td>Input signal voltage</td>
<td>24VDC ±10% (5mA)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Output Point Specification**

<table>
<thead>
<tr>
<th>Transistor-T</th>
<th>General speed</th>
<th>High speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. exchange (working) frequency</td>
<td>1Hz**</td>
<td>10kHz</td>
</tr>
<tr>
<td>Switching</td>
<td>2A</td>
<td>0.3A/point@40°C</td>
</tr>
<tr>
<td>Current load</td>
<td>1.5A</td>
<td></td>
</tr>
<tr>
<td>Voltage spec.</td>
<td>250VAC/250VDC</td>
<td></td>
</tr>
</tbody>
</table>

**Relay-R**
| Response time | 10ms |
| OFF→ON: 20μs<br>ON→OFF: 30μs |

**Note**

1. For more detailed specifications, see "Specification" section in the instruction sheet of each model.
2. When the input point on MPU conducts any general input functions, use D1020 or D1021 to adjust the response time. (Default: 10ms)

ISPSoft Programming Software

ISPSoft 1.0

The new PLC programming software, ISPSoft, compatible with all DVP series PLC, supports ladder diagram, function block and many other programming modes and is able to edit program in modular way. ISPSoft saves your time in developing large projects. Use the already made function block over and over again to increase your economical benefits.

Task Designation

The entire program is divided into many program units (POU), including programs and function blocks. The compiled POU can only be operated under designated condition (TASK) to control the execution of PLC.

Function Block

The complicated project can be parted to many program units or function blocks. The function block can be used repeatedly.

To create new cyclic or interruption programs, you have to create new POU and designate TASK first. Undesignated POU will not be executed.

SFC Chart

Direct editing of SFC chart allows faster and handler programming process.

The function block can be made and used freely in the program. Use import/export function to apply the block in different programs. Particularly when many programs require the same function, the function block helps increase the efficiency of program editing.

Execution condition (TASK)

The program structure can be managed and the execution arranged and handled in easier way.
**ISPSoft Programming Software**

**ISPSoft 1.0**

**Function Block Import/Export**

- **Variable Declaration**
  - Global variable: Separate form the program. The corresponding physical I/O point of the variable is defined only after the program is compiled. The user does not need to modify the program when the definition of the physical I/O point is changed. Only the device corresponding to the variable needs to be modified.

  - Local variable: Stored in POU. If the user does not give it a device, the system will automatically allocate a device to the variable when compiling.

  When writing the function block, it is suggested that the variable be configured by the system itself to increase the independency of the block.

- **Password Protection**
  - The user can set up password for each function block. When the block is used in other programs, the password is required to open the editing window of the block.

  - **Device List**
    - The device list helps the user to know clearly all the devices used in the program.

  - **Structural Editing**
    - Every section of the program is composed of many networks. ISPSoft provides many kinds of components for the user to drag for use.

  - **Complete Monitoring**
    - The "Program monitoring" and "Device monitoring" allow the user to keep track of the operation of the program.

  - **Flexible Use of Components**
    - Drag the components in the function library to use for editing.

  - **Compatible with WPLSoft**
    - The user can convert the file edited in WPLSoft to be compatible with ISPSoft.
Model Name Explanation

- **MPU**
  - DVP Series
  - 1. Total I/O points
  - E5X2/SX2/EX2 series MPU
  - S5/S2/SX2 series MPU
  - SA2/SX2 series MPU
  - SC: SC series MPU
  - SV: SV series MPU
  - PM: PM series MPU
  - EH: EH series MPU
  - ML: ML series MPU
  - EH: EH series MPU
  - E: E series MPU
  - F: F series MPU
  - Y: Y series MPU
  - PS: PS series MPU

- **DI/DO Module**
  - DVP Series
  - 1. Total I/O points
  - S: For S5/SA2/SX2/SX2 series MPU
  - PT: P/T100 type thermoregulation module
  - TC: Thermocouple type thermoregulation module
  - XA: AD: DA module
  - H: For EH2/PM series MPU
  - H: For EH2/PM series MPU

- **AIO/AC Module**
  - DVP Series
  - 1. Total I/O points
  - DA: Digital/analog conversion
  - PT: P/T100 type thermoregulation module
  - TC: Thermocouple type thermoregulation module
  - XA: AD: DA module
  - H: For EH2/PM series MPU
  - H: For EH2/PM series MPU

- **Peripherals**
  - DVP Series
  - 1. Product name: HNP: Handheld programming panel
  - DU: Display panel
  - 2. Type/function: O1: Type 01
  - O2: Type 02
  - O3: Type 03

- **Network Module**
  - DVP Series
  - 1. Model: EN01: Modbus TCP
  - DINET: DeviceNet master
  - CP01: CANopen master
  - DP01: PROFIBUS DP master
  - D01: DeviceNet master
  - H2: For EH2 series MPU
  - H2: For EH2 series MPU

- **Remote I/O**
  - DVP Series
  - 1. Model: RYU: DeviceNet master
  - 485: RS-485
  - EN01: Modbus TCP

- **Function Card**
  - DVP Series
  - 1. Function Card
  - 2. Type: C222: RS-232 card
  - C222: RS-422 card
  - 2. Type: 2D: 2D card, transistor output
  - 1. Accessory: S: Slave mode
  - 2. Type: B: Battery
  - 3. Type: O1, O2, O3

Select A Suitable PLC

Select your desired specifications and locate the most suitable MPU.

<table>
<thead>
<tr>
<th>Item</th>
<th>Spec.</th>
<th>Check</th>
<th>Locate MPU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>AC</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I/O points</td>
<td>&lt; 256</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Program capacity</td>
<td>&lt; 8k</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Output type</td>
<td>Transistor (PNP)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Differential signal</td>
<td>☐</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td>Communication</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Positioning</td>
<td>&lt; 4 axes</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>High-speed counting</td>
<td>&lt; 2 channels</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Analog function</td>
<td>&lt; 4 channels (AD)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Note:</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Note: ☐: With such specification - ☐: Varies upon model - ☐: With such specification when connected to extension module
*1: 8-series and S2 series support only slave. 5V, 5X2/S2/S2A series support both master and slave.
*2: 4-series and 5X2 series have 4 channels of analog input and 2 channels of analog output.
*3: Besides the built-in 6 channels of high-speed counter, EH2 series can be connected to high-speed counter modules.
## Ordering Information

### ES/EX Series MPU

<table>
<thead>
<tr>
<th>Product name</th>
<th>Power supply</th>
<th>Output method</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Model name</th>
<th>Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-240VAC</td>
<td>Relay</td>
<td>6</td>
<td>6</td>
<td></td>
<td>DVP145E002</td>
<td></td>
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<tr>
<td>100-240VAC</td>
<td>Transistor</td>
<td>8</td>
<td>8</td>
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<td>DVP145E002T</td>
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<tr>
<td>100-240VAC</td>
<td>Relay</td>
<td>12</td>
<td>12</td>
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<td>DVP245E002</td>
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<tr>
<td>100-240VAC</td>
<td>Transistor</td>
<td>16</td>
<td>16</td>
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<td>DVP245E002T</td>
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<tr>
<td>100-240VAC</td>
<td>Relay</td>
<td>18</td>
<td>18</td>
<td></td>
<td>DVP345E002</td>
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</tr>
<tr>
<td>100-240VAC</td>
<td>Transistor</td>
<td>24</td>
<td>24</td>
<td></td>
<td>DVP345E002T</td>
<td></td>
</tr>
<tr>
<td>100-240VAC</td>
<td>Relay</td>
<td>36</td>
<td>36</td>
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<td>DVP545E002</td>
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</tr>
<tr>
<td>100-240VAC</td>
<td>Transistor</td>
<td>48</td>
<td>48</td>
<td></td>
<td>DVP545E002T</td>
<td></td>
</tr>
<tr>
<td>100-240VAC</td>
<td>Relay</td>
<td>6</td>
<td>6</td>
<td></td>
<td>DVP202EX002</td>
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</tr>
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<td>100-240VAC</td>
<td>Analog</td>
<td>4</td>
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<td>DVP202EX002R</td>
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</tr>
</tbody>
</table>

### ES/EX Series Digital/Analog Module

<table>
<thead>
<tr>
<th>Product name</th>
<th>Output method</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Model name</th>
<th>Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Relay</td>
<td>8</td>
<td></td>
<td>DVP58XM11N</td>
<td></td>
</tr>
<tr>
<td>+</td>
<td>Transistor</td>
<td>8</td>
<td></td>
<td>DVP58XM11T</td>
<td></td>
</tr>
<tr>
<td>+</td>
<td>Analog</td>
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### ES/EX Series Digital/I/O Module (AC power supply)

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### ES/EX2 Series MPU

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### ES2/EX2 Series MPU

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### ES2/EX2 Series Digital/Analog Module

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### ES/EX2 Series Digital/I/O Module (AC power supply)

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### Execution time of basic instructions

- 3.3μs
- 1.5μs

*1. Consult your sales representative for the official launch date.

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<th>Product name</th>
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<th>Inputs</th>
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<td>100-240VAC</td>
<td>Translator</td>
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<td>DVP1610H08T2</td>
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<td>100-240VAC</td>
<td>Relay</td>
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<td>DVP2020H08R2</td>
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<td>100-240VAC</td>
<td>Bus-in 2 zones of independent 300VDC pulse output</td>
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<td>100-240VAC</td>
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### Ordering Information

**S Series MPU**

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<th>Power supply</th>
<th>Output method</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Model name</th>
<th>Certificates</th>
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<tbody>
<tr>
<td>S8 series standard MPU</td>
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<td>Relay</td>
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<td>6</td>
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<td>S8 series advance MPU</td>
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<td>4</td>
<td>DVPI25A11T</td>
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<td>SX series standard MPU</td>
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<td>4</td>
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| Execution time of basic instructions | 3.5μs | Execution time of MOV instruction | 3.6μs |

**S Series Extension Module / Left-Side High-Speed Module**

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<th>Outputs</th>
<th>Model name</th>
<th>Certificates</th>
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<td>Left-side High-speed analog I/O module</td>
<td>24VDC</td>
<td>4 groups of analog input 1-17</td>
<td>4 groups of analog input 17</td>
<td>DVPI4AD2-SL</td>
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<tr>
<td></td>
<td></td>
<td>Signal range: 1-17: ±0.5 V; 18-19: ±5 V; 10-19: ±10 V; 20-29: ±10 V</td>
<td>4 groups of analog input 17</td>
<td>DWPI4AD2-SL</td>
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<tr>
<td></td>
<td></td>
<td>Resolution: 12-bit</td>
<td>4 groups of analog input 17</td>
<td>DVPI4AD2-SL</td>
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<td></td>
<td>Single-channel OnOff setup enhances entire conversion efficiency</td>
<td>4 groups of analog input 17</td>
<td>DVPI4AD2-SL</td>
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<tr>
<td></td>
<td></td>
<td>Converter sends 2D / 3D data</td>
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<td></td>
<td>Off-line alarm: 1<del>5 V; 6</del>10mA</td>
<td>4 groups of analog input 17</td>
<td>DVPI4AD2-SL</td>
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**Left-side high-speed load cell module**

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<th>Outputs</th>
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<th>Certificates</th>
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<td>4 groups of analog input 1-17</td>
<td>4 groups of analog input 17</td>
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<td>Signal range: 1-17: ±5 V; 18-20: ±20mA</td>
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<td></td>
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<td>Resolution: ±0.1%</td>
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<td></td>
<td></td>
<td>Built-in RS-485 interface</td>
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**Temperature measurement module**

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<th>Certificates</th>
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<td>4 points of platinum RTD (Pt100) sensor inputs</td>
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<td>Resolution: ±0.1%</td>
<td>4 points of platinum RTD (Pt100) sensor inputs</td>
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<td>Built-in RS-485 interface</td>
<td>4 points of platinum RTD (Pt100) sensor inputs</td>
<td>DVPI4TS1-B</td>
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**S Series Digital/Analog Module**

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<th>Outputs</th>
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<th>Certificates</th>
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<td>12</td>
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**Communication modules**

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<td>DeviceNet slave communication module</td>
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**Remote I/O module**

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<td>Remote I/O module</td>
<td>24VDC</td>
<td>RS-485 remote I/O module, convertible to S series I/O modules</td>
<td>RS-485 remote I/O module</td>
<td>DVPI42-SL</td>
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<td></td>
<td></td>
<td>Ethernet communication module, 10/100Mbps</td>
<td>Ethernet communication module, 10/100Mbps</td>
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<td></td>
<td>Ethernet remote communication module</td>
<td>Ethernet remote communication module</td>
<td>DVPI42-SL</td>
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<td></td>
<td>CANopen master communication module, 10Mbps</td>
<td>CANopen master communication module, 10Mbps</td>
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**Communication Converter**

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<th>Certificates</th>
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<tr>
<td>Communication converter</td>
<td>USB to RS-485 converter</td>
<td>DV4000</td>
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<td>USB to CAN converter</td>
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<td>USB to RS-485 converter</td>
<td>DV4000</td>
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<td>Modbus TCP to RS-232/485 converter</td>
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<td>EtherCAT to RS-232/485 converter</td>
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<td>DeviceNet to RS-232/485 converter</td>
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<td>USB to RS-485 converter</td>
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<td>USB to RS-485 converter</td>
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</table>

*Digital/analog module variation. No variation among channels.*
## Ordering Information

### PM Series

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Power supply</th>
<th>Output voltage</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Model name</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional motor control MPU</td>
<td>100-240VAC</td>
<td>Differential (Built-in 2-10 independent transistor output)</td>
<td>8 x 8</td>
<td></td>
<td>DVP07PN506D</td>
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</table>

**PM series extension module**

<table>
<thead>
<tr>
<th>Description</th>
<th>Model name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication card</td>
<td>Ethernet/CANopen communication card</td>
</tr>
<tr>
<td>Memory card</td>
<td>Data backup memory card (10k words)</td>
</tr>
</tbody>
</table>

- Execution time of basic instructions: 3.3μs
- Execution time of MOV instruction: 3.7μs

### TP Series

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Description</th>
<th>Model name</th>
<th>Certification</th>
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</table>

### Peripheral Accessories

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Description</th>
<th>Model name</th>
<th>Certification</th>
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</thead>
<tbody>
<tr>
<td>Handheld programming panel</td>
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<td>DVP-PPX22</td>
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<tr>
<td>Data backup memory card (built-in 10k words)</td>
<td>DVP-PPXM</td>
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<tr>
<td>Communication cable for DVP-HIP series and PLC, 1m</td>
<td>DVP-CAC14S</td>
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<tr>
<td>Communication cable for PLC (0-5m &amp; 25m (D-Bus) and PLC, 1.5m</td>
<td>DVP-CAC21S</td>
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<tr>
<td>Communication cable for PLC (0-5m &amp; D-Bus) and PLC, 1.5m</td>
<td>DVP-CACAB3A</td>
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<tr>
<td>I/O connection cable for PLC (0-5m &amp; D-Bus) and PLC, 3m</td>
<td>DVP-CACAB50</td>
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<tr>
<td>I/O connection cable for DVP-32SM series</td>
<td>DVP-CACAB1A</td>
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<td>I/O connection cable for DVP-32SM series</td>
<td>DVP-CACAB51B</td>
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### Accessory

<table>
<thead>
<tr>
<th>Description</th>
<th>Model name</th>
<th>Certification</th>
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<tbody>
<tr>
<td>Bumpers 4 types of RS-485 connectors</td>
<td>AQP-ABS-01</td>
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<tr>
<td>Connection cable for ADPAM-01 and ASADA-A series servo</td>
<td>AQP-CAB02A</td>
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<tr>
<td>Connection cable for ADPAM-01 and ASADA-B series servo</td>
<td>AQP-CAB01B</td>
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<tr>
<td>I/O extension cable for PLC, 30m</td>
<td>DVP-CAB409</td>
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<tr>
<td>Extension cable connector for 10 series MPU and extension module</td>
<td>DVP-CAST1-1</td>
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<tr>
<td>Extension cable for 10 series MPU and extension module, 2m</td>
<td>DVP-CABAAA</td>
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<tr>
<td>Extension cable for 10 series MPU and extension module, 1.8m</td>
<td>DVP-CABAA41</td>
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<tr>
<td>Dedicated CANopen distribution box, 1 x 2</td>
<td>TP-CN01</td>
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<tr>
<td>Dedicated CANopen distribution box, 1 x 4</td>
<td>TP-CN02</td>
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<tr>
<td>Dedicated CANopen distribution box, 1 x 4, R-L connector</td>
<td>TP-CN03</td>
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<tr>
<td>Terminal resistance for CANopen communication</td>
<td>TP-CN01</td>
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</table>

### Industrial Power Supply

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Power supply</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Model name</th>
<th>Certification</th>
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<tbody>
<tr>
<td>DVP series</td>
<td>1-phase</td>
<td>85 - 264VAC</td>
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<td>DVP3061</td>
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<td>DVP series</td>
<td>3-phase</td>
<td>320 - 575VAC/40 - 600V</td>
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<td>DVP3061</td>
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<td>DVP series</td>
<td>3-phase</td>
<td>85 - 264VAC/120 - 375V</td>
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<td>DVP3061</td>
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</table>

For more detailed specifications, visit [http://www.deltaplex.com/instantupdatasheetForallusersmanualsOfDVP-PLC](http://www.deltaplex.com/instantupdatasheetForallusersmanualsOfDVP-PLC)