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DVP

DELTA Programmable Logic Controller



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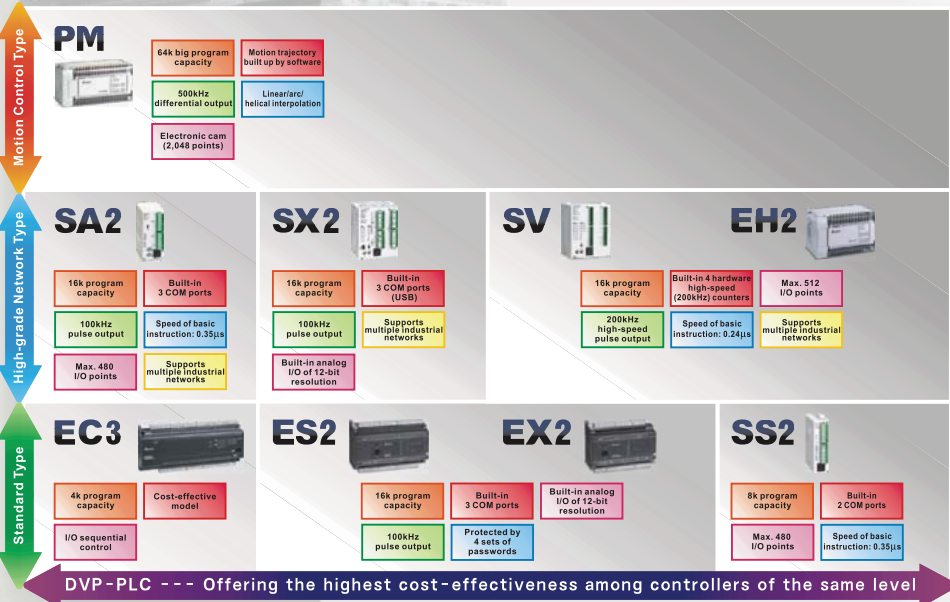
reddot design award
winner 2010

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, bountiful 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.



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DVP-PLC --- Offering the highest cost-effectiveness among controllers of the same level

The 2nd-Generation DVP Series PLC

The brand-new DVP-EH2, DVP-ES2, DVP-SS2, DVP-SA2 and DVP-SX2 are greatly upgraded in terms of functions and full program compatibility!

DVP-ES2/EX2

Second Generation Sequential Control / Integrated Analog I/O MPU



reddot design award winner 2010



- MPU points: 16/20/24/32/40/60
- Max. I/O points : 256
- Program capacity : 16k steps
- Program execution speed : 0.54µs
- Built-in 1 RS-232 and 2 RS-485 ports, compatible with Modbus ASCII/RTU protocol. Can be master or slave.
- Data register: 10k words
- Built-in 8 points of high-speed input (100kHz*2, 10kHz*6), supporting U/D, U/D Dir, CW/CCW, A/B counting modes
- Built-in 4 points of pulse input (100kHz*2, 10kHz*2), supporting Pulse, Pulse Dir, A/B, CW/CCW modes

DVP-EH2

High Performance MPU

- MPU points: 16/20/32/40/48/64/80
- Max. I/O points: 512
- Program capacity: 16k steps
- Program execution speed: 0.24µs (basic instruction)
- Built-in RS-232 and RS-485 ports, compatible with Modbus ASCII/RTU protocol
- Data register: 10k words
- File register: 10k words
- High-speed pulse output: 20- and 32-point models support 2 points (Y0, Y2) of 200kHz pulse output; 40-point models support 4 points (Y0, Y2, Y4, Y6) of 200kHz pulse output.
- Supports max. 4 hardware 200kHz high-speed counters
- DVP32EH2-L 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/3-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-SS2

Second Generation Standard Slim MPU

- MPU points: 14
- Max. I/O points: 480
- Program capacity: 8k steps; Device D: 5k words, compatible with program of the existing DVP-SS series MPU
- Program execution speed: 0.35 to 1µs (basic instruction), 3.4µs (MOV)
- High-speed pulse output: 4 points of 10kHz pulse output
- Max. 8 points of high-speed input and external interruption input (200kHz*4 points)
- Built-in RS-232 and RS-485 ports, compatible with Modbus ASCII/RTU protocol. Can be master or slave.

NEW



DVP-SA2

Second Generation Advanced Slim MPU

- MPU points: 12 (8DI/4DO)
- Max. I/O points: 480 (left side extendable to high-speed modules)
- Program capacity: 16k steps; Device D: 10k words, compatible with program of the existing DVP-SA series MPU
- Program execution speed: 0.35 to 1µs (basic instruction), 3.4µs (MOV)
- High-speed pulse output: 4 points of pulse output (100kHz*2, 10kHz*2)
- 8 points of high-speed pulse input and external interruption input (100kHz*3 points, 10kHz*5 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.

NEW



DVP-SX2

Second Generation Slim 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
- Compatible with program of the existing DVP-SX series PLC
- Program execution speed: 0.35 to 1µs (basic instruction), 3.4µs (MOV)
- Built-in 1 mini USB for program upload/download and monitoring
- 4 points of high-speed pulse output (100kHz*2, 10kHz*2)
- 8 points of high-speed pulse input and external interruption input (100kHz*2, 10kHz*6)
- Built-in RS-232 and RS-485 ports, compatible with Modbus ASCII/RTU protocol. Can be master or slave.

NEW



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



DVP-ES2/EX2 DVP-EC3

- 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: 16/20/24/32/40/60
- 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 100kHz & 2 points (Y1, Y3) of 10kHz high-speed pulse output

Built-in High-Speed Counters

1-phase 1		1-phase 2		2-phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
2/6	100kHz/10kHz	2	100kHz	1/3	15kHz/5kHz

*Refers to the max. counting range of a single counter.

Built-in Analog I/O in EX2 Model

Analog Input		Analog Output	
Points	Resolution	Points	Resolution
4	12-bit	2	12-bit
Spec.	-20~20mA or -10~10V	Spec.	0~20mA or -10V~10V

- High reliability
- Most cost-effective solution to sequential control & communication monitoring for small PLC

Specification & Performance

- MPU points: 10/14/16/20/24/30/32/40/60
- Program capacity: 4k steps
- COM port: Built-in RS-232 & RS-485 ports (10/14/30-point models do not support RS-485), compatible with Modbus ASCII/RTU protocol

High-Speed Pulse Output

Supports 2 points (Y0, Y1) of independent high-speed (max. 1kHz) pulse output

Built-in High-Speed Counters

1-phase 1		1-phase 2		2-phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
2/2	20kHz/10kHz	1	20kHz	1	4kHz

*Refers to the max. counting range of a single counter.

DVP-EH2

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

Specification & Performance

- MPU points: 16/20/32/40/48/64/80
- Max. I/O points: 512
- Program capacity: 16k steps
- Instruction execution speed: 0.24μs (basic instruction)
- COM port: Built-in RS-232 & RS-485 ports, compatible with Modbus ASCII/RTU protocol
- Data register: 10k words
- File register: 10k words

High-Speed Pulse Output

20/32-point models support 2 points (Y0, Y2) of 200kHz pulse output. 40-point model supports 2 groups (Y0, Y1) (Y2, Y3) of A/B phase 200kHz pulse output & 2 points (Y4, Y6) of 200kHz pulse output.

Built-in 4 Hardware High-Speed Counters

Standard		Hardware high-speed counter					
1-phase 1		1-phase 1		1-phase 2		2-phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
6	10kHz	2/2	200kHz/20kHz	2/2	200kHz/20kHz	2/2	200kHz/20kHz

*Refers to the max. counting range of a single counter.

- Supports 2-axis linear/arc interpolation motion control
- Runs with various high-speed function extension modules & function cards to achieve all kinds of real-time applications

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.

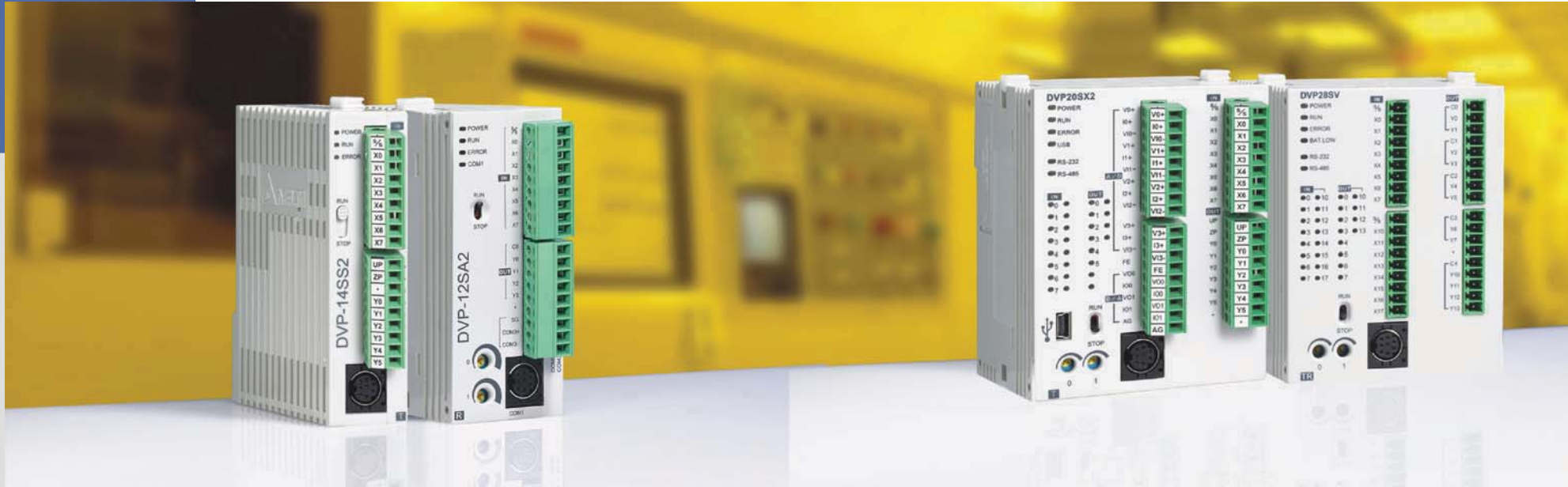
Linear/Arc Interpolation Motion Control

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
- Extendable to 8 right-side modules

Specification & Performance

- MPU points: 14 (8DI + 6DO)
- Max. I/O points: 494 (14 + 480)
- Program capacity: 8k steps
- COM port: Built-in RS-232 & RS-485 ports, compatible with Modbus ASCII/RTU protocol. Can be master or slave.

High-Speed Pulse Output

Supports 4 points (Y0 ~ Y3) of independent high-speed (max. 10kHz) pulse output

Supports PID Auto-tuning

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

Built-in High-Speed Counters

1-phase 1		1-phase 2		2-phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
4/4	20kHz/10kHz	2	20kHz	2/2	10kHz/5kHz

DVP-SA2

- Large program capacity to enhance operation efficiency
- Extendable to 8 right-side modules
- Extendable to left-side high-speed interfaces
- Supports PLC-Link (max. speed: 921kpbs)

Specification & Performance

- MPU points: 12 (8DI + 4DO)
- Max. I/O points: 492 (12 + 480)
- Program capacity: 16k steps
- COM port: Built-in RS-232 & 2 RS-485 ports, compatible with Modbus ASCII/RTU protocol. Can be master or slave.

High-Speed Pulse Output

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

Extendable to Max. 8 Modules

DVP-SA2 is extendable to analog I/O, temperature measurement, input DIP switch, PROFIBUS/DeviceNet communication modules and single-axis motion control functions.

Built-in High-Speed Counters

1-phase 1		1-phase 2		2-phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
3/5	100kHz/10kHz	1	100kHz	1/3	50kHz/5kHz

DVP-SX2

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

Specification & Performance

- MPU points: 20 (8DI/6DO, 4AI/2AO)
- Max. I/O points: 494 (14 + 480)
- Program capacity: 16k steps
- COM port: Built-in RS-232, RS-485 & USB ports, compatible with ASCII/RTU protocol. Can be master or slave.

High-Speed Pulse Output

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

Built-in High-Speed Counters

1-phase 1		1-phase 2		2-phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
2/6	100kHz/10kHz	2	10kHz	1/3	15kHz/5kHz

*Refers to the max. counting range of a single counter.

Built-in Analog I/O

Analog Input		Analog Output	
Points	Resolution	Points	Resolution
4	12-bit	2	12-bit
Spec.	-20~20mA or -10~10V 4~20mA	Spec.	-20~20mA or -10~10V 4~20mA

DVP-SV

- Outstanding operation efficiency
- Large capacity for programming
- Extendable to left-side high-speed interfaces
- Supports linear/arc interpolation

Specification & Performance

- MPU points: 28 (16DI/12DO)
- Max. I/O points: 512
- Program capacity: 16k steps
- Instruction execution speed: 0.24μs (basic instruction)
- COM port: Built-in RS-232 & RS-485 ports, compatible with Modbus ASCII/RTU protocol
- Data register: 10k words
- File register: 10k words

High-Speed Pulse Output

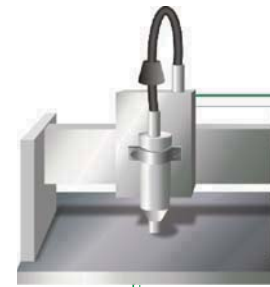
- Supports 2 groups (Y0, Y1) (Y2, Y3) of A/B phase pulse output (max. 200kHz).
- Supports 2 points (Y4, Y6) of high-speed (max. 200kHz) pulse output.

Built-in 4 Hardware High-Speed Counters

Standard		Hardware high-speed counter					
1-phase 1		1-phase 1		1-phase 2		2-phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
6	10kHz	2/2	200kHz/20kHz	2/2	200kHz/20kHz	2/2	200kHz/20kHz

*Refers to the max. counting range of a single counter.

DVP-PM Series MPU



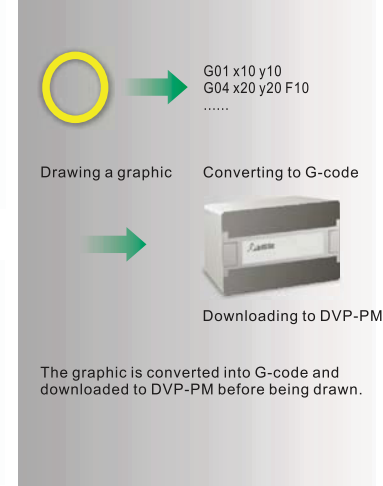
Function Cards for DVP-PM		
Model name	Spec.	Features
PM-PCC01	Data backup memory card	Auto read/write program
DVP-FPMC	Ethernet/CANopen communication card *Supports function cards for DVP-EH2: DVP-F2AD, DVP-F2DA, DVP-F232S, DVP-F485S	1. Complies with CANopen DS301 V4.01 protocol. 2. Supports CANopen DS402 V2.1.4 synchronous axes, 128 asynchronous axes. 3. Provides high-speed upload/download of Ethernet program.

Can be MPU or Extension Module

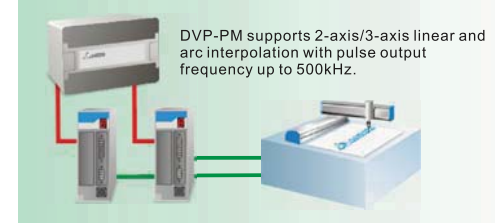


DVP-PM can be used as a PLC MPU as well as an extension module. It is compatible with all EH2 series extension modules.

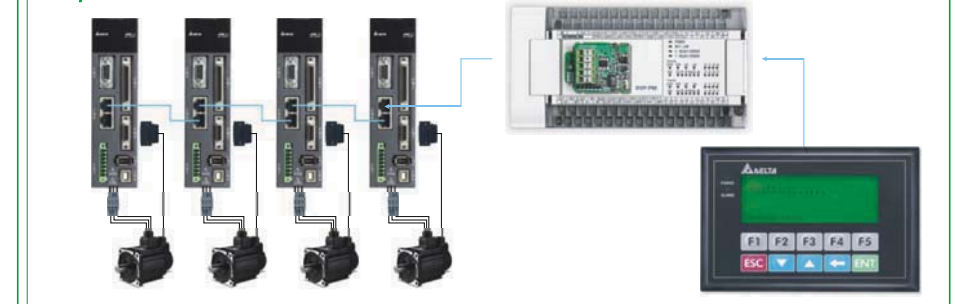
G-Code Compatible



Professional Motion Control



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.



DVP-PM

- 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-)

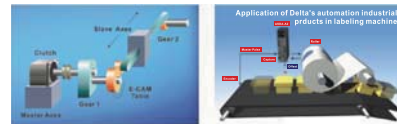
Supports MPG & Multiple External Signals Input

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

Model name	Spec.
DVP20PM00D	⌀ Ⓢ Ⓜ Ⓡ → 2 axes
DVP20PM00M	⌀ Ⓢ Ⓜ Ⓡ → 3 axes
	⌀ : AC power supply Ⓢ : Input points
	Ⓜ : Output points Ⓡ : Relay output

DVP20PM00DIM 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.

Applications of DVP-PM

Speedy, Stable, Precise

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

Conventionally, 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 I/O point of the variable is defined only after the program is compiled. The user does not need to modify the program.

Function Block

A complicated project can be divided into many function blocks. A function block can be used repeatedly. The import/export function makes the programming more convenient.

Full Monitoring & Simulation

The "program monitoring" and "device 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

Class	Identifiers	Address	Type	Initial	Comment
VAR	Axis_Scan		FPMC_Scan		FPMC扫描动作
VAR	Axis_Scale		FPMC_Scale		FPMC比例系数
VAR	Axis_VOP		FPMC_VOPParam		FPMC速度反馈增益
VAR	Axis_RIP		FPMC_ReadParam		FPMC读取参数

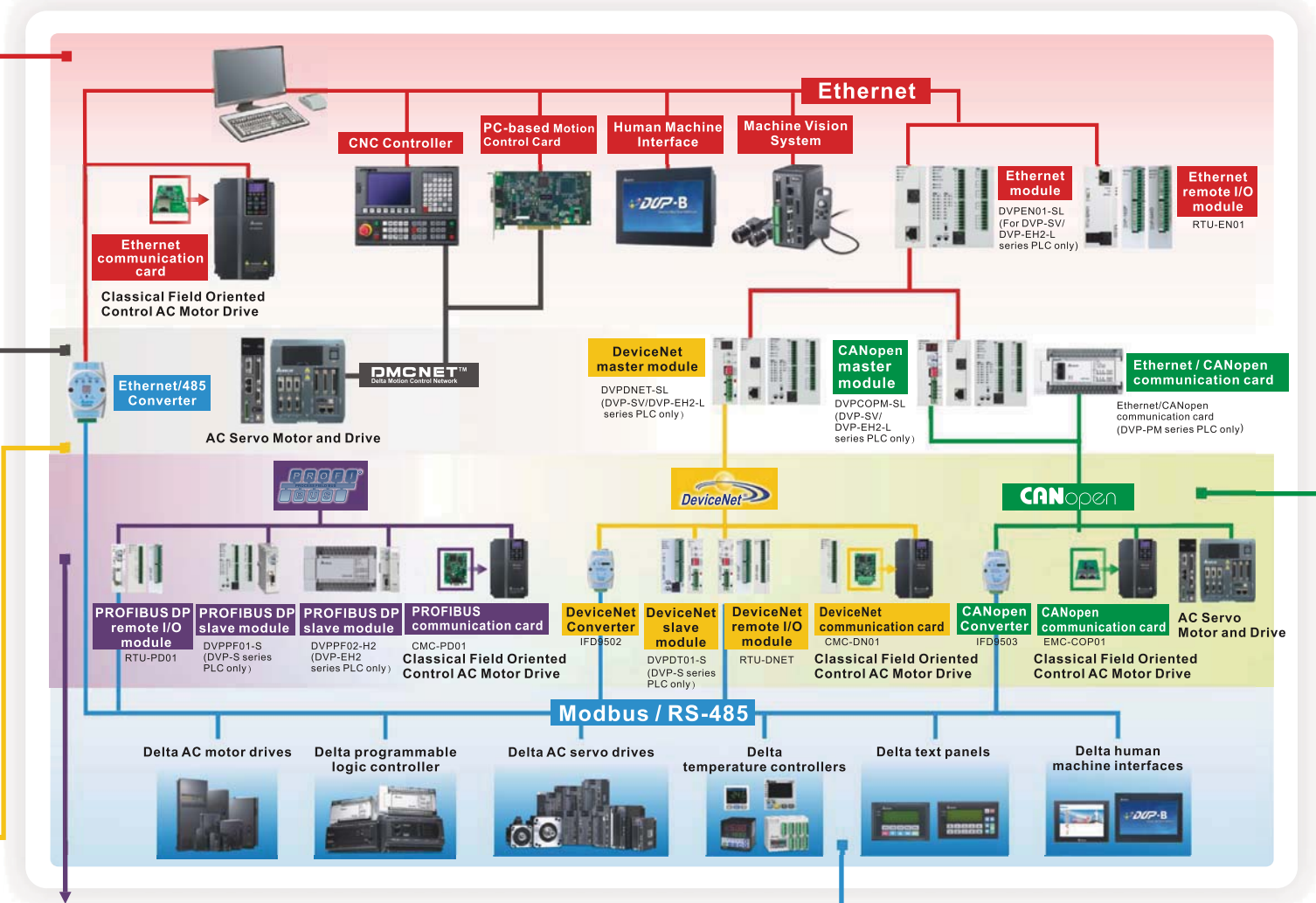
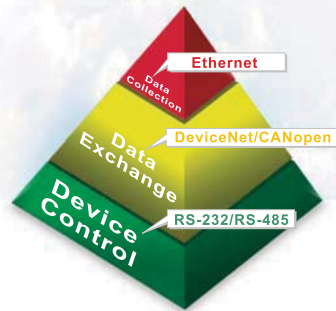
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10

Delta Industrial Automation Solutions



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



Ethernet

Delta Ethernet products transcend the limits on transmission distance, offering 10/100M bps high-speed transmission and efficient remote monitoring.

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

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 TP04G-AL-C

- 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

Dimensions	4.1" (101.8 x 35.24mm)
Resolution	192 x 64
Display color	Monochrome
Flash Memory	256k bytes
SRAM	16k/10k bytes
Function keys	10 function keys
Password	Available
Recipe function	Not available
Real-time clock	Available
Serial COM port	RS-232 & RS-422/485
Editing software	TPEditor

TP02G-AS1 TP04G-AS2

- STN LCD size: 72 x 22mm (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	72 x 22 mm / 3" (67mm x 32 mm)
Resolution	160 x 32 / 128 x 64
Display color	Monochrome
Flash Memory	256k bytes
SRAM	32k bytes
Function keys	16 / 12 function keys
Password	Available
Recipe function	Not available
Real-time clock	Available
Serial COM port	RS-232 & RS-422/485
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" (101.8 x 35.24mm)
Resolution	192 x 64
Display color	Monochrome
Flash Memory	256k bytes
SRAM	10k bytes
Function keys	17 function keys
Password	Available
Recipe function	Not available
Real-time clock	Available
Serial COM port	RS-232
Editing software	TPEditor

TP08G-BT2

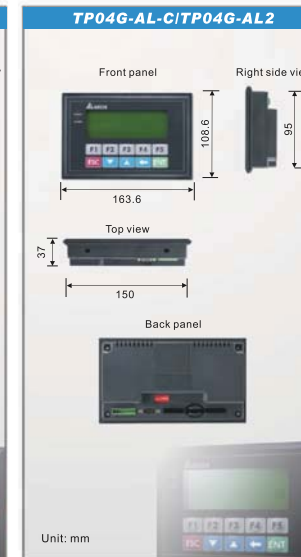
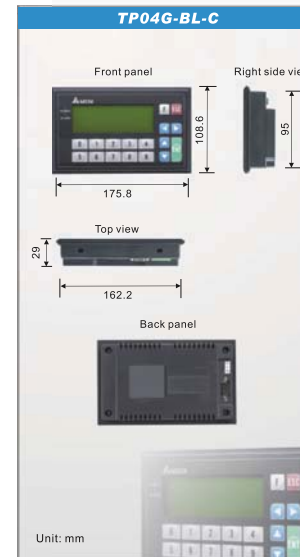
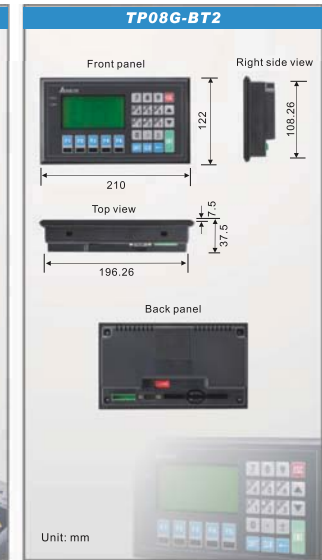
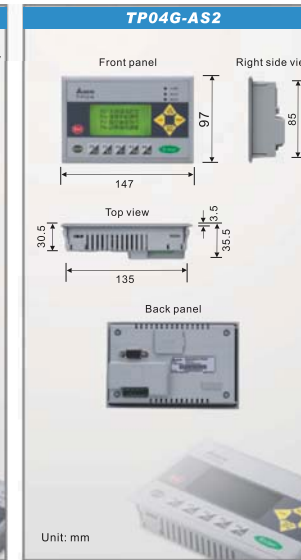
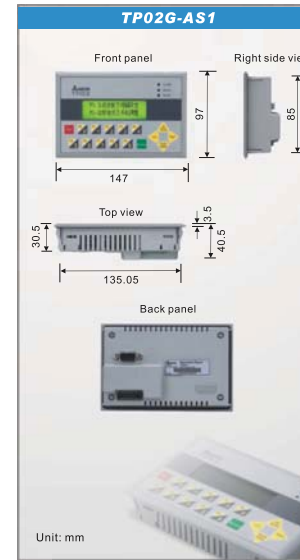
- 3.8" STN LCD
- Resolution: 240 x 128 dots
- Built-in 1,024kB flash memory
- 24 user-defined function keys available
- Built-in RS-232 and RS-485/RS-422 COM ports
- Supports recipe and macro functions
- Supports Modbus slave mode

Dimensions	3.6" (83mm x 41 mm)
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-422/485
Editing software	TPEditor

Hardware Specifications

Product Outline & Dimensions

Model name		TP02G-AS1	TP04G-AS2	TP08G-BT2	TP04G-AL-C	TP04G-AL2	TP04G-BL-C
Display specifications	Screen type	STN LCD					
	Display color	Monochrome					
	Resolution	160 x 32	128 x 64	240 x 128	192 x 64		
	Backlight	Life span of backlight is about 50,000 hours at 25 °C					
	Display range	72 x 22mm	3"(67 x 32mm)	3.8" (83 x 41mm)	4.1" (101.8 x 35.24mm)		
Flash memory	256k byte		1M byte		256k byte		
Program download port	COM1(RS-232)						
Serial COM port	COM1	RS-232	RS-232/422		RS-232	RS-232/422	RS-232
	COM2	RS-485		-	RS-485	-	
Extension interface	The slot for program copy card						
Real-time clock	Built-in						
Auxiliary keys	System keys	6	7	12	5	7	
	Function keys	10	5	12	5	10	
Operating voltage	DC +24V (-10% ~ +20%)						
Backup battery	3V lithium battery CR2032 x 1 / battery life: 5 years						
Buzzer	85dB						
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	IEC61131-2, IEC 68-2-6 (TEST Fc) 5Hz ≤ f < 8.4Hz Continuous: 3.5mm 8.4Hz ≤ f ≤ 150Hz Continuous: 1.0g						
Shock	IEC61131-2, 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: 30~230MHz, Limits: 40dB uV/m; Frequency: 230MHz~1GHz, Limits: 47dB uV/m						
Radiated electromagnetic field	EN61000-4-3, Frequency: 80~2000MHz, Limits: 10V/m						
Electrostatic discharge	EN61000-4-2, Air Discharge: 8KV, Contact Discharge: 4KV						
Fast transient burst	EN61000-4-4, Power Line: 1KV, Communication I/O: 500V						
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		
Panel cutout	136 x 85		196 x 108		151 x 96		163 x 96
Weight	240g		430g		268g		270g
Safety approvals (Waterproof class of front panel)	IP65/NEMA4 & CE, UL Type 4 indoor				IP65/NEMA4 & CE		



Extension Modules

DVP-EH2

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
- Digital Input Point Extension
DVP-F41P
- DIP Switch Input
DVP-F81D
- Add additional 3rd COM port
DVP-F232S DVP-F485S
- Transistor Output
DVP-F20T
- Frequency Measurement Card
DVP-F2FR
- Analog I/O
DVP-F2DA DVP-F2AD
- Analog Input
DVP-F6VR

Accessories

- Data Backup Card
DVP-256FM (for special purpose) DVPPCC01 (for general purpose)
- Data Transmission Cable
DVPACAB2A30
- Handheld Programming Panel
DVP-HPP
- Digital Display Panel
DVPDU01
- Extension Cable Connector for EH/PM Series
DVPAEXT01-H
- Connector for MPU & Extension Module
DVPACAB4A09(0.9m) DVPACAB4A18(1.8m)

Model name	Spec.
DVP16EH00R2	—AC— 6 8 R—
DVP16EH00T2	—AC— 6 8 T—
DVP20EH00R2	—AC— 12 8 R—
DVP20EH00T2	—AC— 12 8 T— 2-axes of 200kHz (each axis) pulse output; supports 1 group of linear/arc interpolation.
DVP32EH00R2	—AC— 16 16 R—
DVP32EH00T2	—AC— 16 16 T— 2-axes of 200kHz (each axis) pulse output; supports 1 group of linear/arc interpolation.
DVP32EH00M2	—AC— 16 16 M— 2-axes of 200kHz (each axis) pulse output.
DVP32EH00R2-L*	—AC— 16 16 R—
DVP32EH00T2-L*	—AC— 16 16 T— 2-axes of 200kHz (each axis) pulse output; supports 1 group of linear/arc interpolation.
DVP40EH00R2	—AC— 24 16 R—
DVP40EH00T2	—AC— 24 16 T— 4-axes of 200kHz (each axis) pulse input/output; supports 2 groups of linear/arc interpolation.
DVP48EH00R2	—AC— 24 24 R—
DVP48EH00T2	—AC— 24 24 T—
DVP64EH00R2	—AC— 32 32 R—
DVP64EH00T2	—AC— 32 32 T—
DVP80EH00R2	—AC— 40 40 R—
DVP80EH00T2	—AC— 40 40 T—

—AC—:AC power supply C:Input points U:Output points R:Relay output T:Transistor output M:Differential output
*Supports left-side high-speed extension.

Digital I/O Modules

- Input Point Extension
DVP08HM11N DVP16HM11N
- 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
 - Analog Output
DVP04DA-H2
V: 12-bit
I: 12-bit
 - Analog Input/Output
DVP06XA-H2
Input 4CH / Output 2CH
V: 12-bit V: 12-bit
I: 11-bit I: 12-bit
- Temperature Measurement
 - Sensor: Pt100
DVP04PT-H2
 - Sensor: J, K, R, S, T type thermocouple
 - DVP32EH00R2-L & DVP32EH00T2-L are also compatible with left-side high-speed extension modules for DVP-SV series.
- Motion Control
 - Single-Axis Positioning
DVP01PU-H2
 - High-Speed Counter
DVP01HC-H2

Extension Modules



The Most Cost-Effective Solution to Sequential Control!

DVP-ES2/EX2

- 256 / 238 points
- 100kHz pulse output
- Analog input/output



reddot design award winner 2010



Model name	Spec.
DVP16ES200R	⊖ ⊕ 8 ↑ ⊕ ⊗
DVP16ES200T	⊖ ⊕ 8 ↑ ⊕ ⊕
DVP24ES200R	⊖ ⊕ 16 ↑ 8 ↑ ⊗
DVP24ES200T	⊖ ⊕ 16 ↑ 8 ↑ ⊕
DVP32ES200R	⊖ ⊕ 16 ↑ 16 ↑ ⊗
DVP32ES200T	⊖ ⊕ 16 ↑ 16 ↑ ⊕
DVP32ES211T	⊖ ⊕ 16 ↑ 16 ↑ ⊕ ⊕
DVP40ES200R	⊖ ⊕ 24 ↑ 16 ↑ ⊗
DVP40ES200T	⊖ ⊕ 24 ↑ 16 ↑ ⊕
DVP60ES200R	⊖ ⊕ 36 ↑ 24 ↑ ⊗
DVP60ES200T	⊖ ⊕ 36 ↑ 24 ↑ ⊕

Model name	Spec.
DVP20EX200R	⊖ ⊕ 6 ↑ 4AI/2AO ⊗
DVP20EX200T	⊖ ⊕ 6 ↑ 4AI/2AO ⊕

- ⊖ ⊕ : AC power supply
- ⊖ ⊕ : DC power supply
- ⊖ ⊕ : Relay output
- ⊖ ⊕ : Input points
- ⊖ ⊕ : Output points
- ⊖ ⊕ : Transistor output

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
- DVP04TC-E2



DVP-SS2



2nd-Generation Slim Standard MPU

Model name	Spec.
DVP14SS211R	⊖ ⊕ ⊕ 6 ↑ ⊕ ⊗
DVP14SS211T	⊖ ⊕ ⊕ 6 ↑ ⊕ ⊕

- ⊖ ⊕ : Relay output
- ⊖ ⊕ : DC power supply
- ⊖ ⊕ : Input points
- ⊖ ⊕ : Transistor output
- ⊖ ⊕ : Output points

DVP-SX2



2nd-Generation Slim Analog I/O MPU

Model name	Spec.
DVP20SX211R	⊖ ⊕ ⊕ 6 ↑ 4AI/2AO ⊗
DVP20SX211T	⊖ ⊕ ⊕ 6 ↑ 4AI/2AO ⊕
DVP20SX211S	⊖ ⊕ ⊕ 6 ↑ 4AI/2AO ⊕ ⊕

- ⊖ ⊕ : Relay output
- ⊖ ⊕ : DC power supply
- ⊖ ⊕ : Transistor output (PNP)
- ⊖ ⊕ : Input points
- ⊖ ⊕ : Transistor output
- ⊖ ⊕ : Output points

DVP-SA2



2nd-Generation Slim Advanced MPU

Model name	Spec.
DVP12SA211R	⊖ ⊕ ⊕ 4 ↑ 4 ⊗
DVP12SA211T	⊖ ⊕ ⊕ 4 ↑ 4 ⊕

- ⊖ ⊕ : Relay output
- ⊖ ⊕ : DC power supply
- ⊖ ⊕ : Input points
- ⊖ ⊕ : Transistor output
- ⊖ ⊕ : Output points

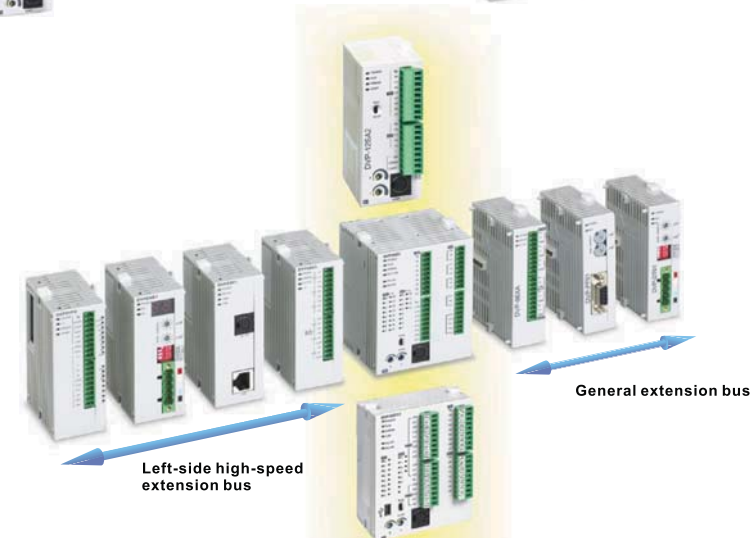
DVP-SV



Functional Slim Type MPU

Model name	Spec.
DVP28SV11R	⊖ ⊕ ⊕ 12 ↑ 12 ⊗
DVP28SV11T	⊖ ⊕ ⊕ 12 ↑ 12 ⊕

- ⊖ ⊕ : Relay output
- ⊖ ⊕ : DC power supply
- ⊖ ⊕ : Transistor output
- ⊖ ⊕ : Input points
- ⊖ ⊕ : Transistor output
- ⊖ ⊕ : Output points





Left-Side High-Speed Extension Modules

Communication Modules

■ **DeviceNet Master**
DVPDNET-SL

■ **Ethernet**
DVPEN01-SL

■ **CANopen Master**
DVP COPM-SL

Analog Function Extension

■ **Analog Input**
DVP04AD-SL

■ **Analog Output**
DVP04DA-SL

■ **DVP02LC-SL***
Load Cell Module

General Extension Modules

I/O Point Extension

■ **Input Point Extension**
DVP08SM11N
DVP16SM11N

■ **Output Point Extension**
DVP06SN11R
DVP08SN11R/T

■ **Input/Output Point Extension**
DVP08SP11R/T
DVP16SP11R/T
DVP16SP11TS(PNP)

■ **Pin Header Input**
DVP32SM11N

■ **Pin Header Output**
DVP32SN11TN

■ **Digital Switch**
DVP08ST11N

Analog Function Extension

■ **Analog Input**
DVP04AD-S
DVP06AD-S

■ **Analog Output**
DVP04DA-S
DVP02DA-S

■ **Analog Input/Output**
DVP06XA-S

Temperature Measurement

■ **Sensor: Pt100**
DVP04PT-S

■ **Sensor: J, K, R, S, T type thermocouple**
DVP04TC-S

Motion Control

■ **Single-Axis Positioning**
DVP01PU-S

Communication Modules

■ **PROFIBUS Slave**
DVP PF01-S

■ **DeviceNet Slave**
DVP DT01-S

Power Supply Modules

DVPPS01
DVPPS02

Electrical Specifications

	AC	DC
Power supply voltage	100 ~ 240VAC (-15% ~ 10%), 50/60Hz ± 5%	24VDC (-15% ~ 20%)
Fuse capacity	2A/250VAC	ES:2A/250VAC;SV:2.5A/30VDC
Spike voltage durability	1,500VAC (Primary-secondary); 1,500VAC (Primary-PE); 500VAC (Secondary-PE)	
Insulation impedance	>5MΩ (all I/O point-to-ground: 500VDC)	
Noise immunity	ESD: 8KV Air Discharge EFT: Power Line · 2kV Digital I/O : 1kV Analog & Communication I/O : 1kV RS: 26MHz ~ 1GHz · 10V/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); 50% ~ 95% (humidity); pollution degree 2	

Input Point Specification*1

Max. Input frequency	10kHz	20kHz	100kHz	200kHz
Input signal type	SINK / SOURCE			
Input signal voltage	24VDC ± 10% (5mA)			
Response time*2	EH2/SV/PM	OFF→ON: 20μs ON→OFF: 50μs	ES/EX/SS/SA/SX/SC SS2/SX2 OFF→ON: 3.5μs ON→OFF: 20μs	SC/ES2/EX2/SA2/SX2 OFF→ON: 2.5μs ON→OFF: 5μs
	ES2/EX2			
	ES/EX			
	SS/SA/SX/SC			
	SS2			
SA2/SX2				EH2/SV/PM OFF→ON: 0.15μs ON→OFF: 3μs

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

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

Output Point Specification*1

	Transistor-T	Relay-R		
		General speed	High speed	
Max. exchange (working) frequency	1Hz*2	10kHz	100kHz	200kHz
Current spec.	EH2/SV/PM	0.3A/point@40°C	SA2/SX2/ES2/EX2 Resistive: 0.5A/point (4A/COM) Conductive: 12W (24VDC) Light bulb: 2W (24VDC) SC <1kHz, 0.3A/point@40°C ≧1kHz, 30mA/point@40°C	EH2/SV/PM Resistive: 0.5A/point (4A/COM) Conductive: 12W (24VDC) Light bulb: 2W (24VDC)
	ES2/EX2			
	ES/EX			
	SS/SA/SX/SC			
	SS2/SA2/SX2	1.5A		
Voltage spec.	250VAC/30VDC	30VDC		
Response time	10ms	OFF→ON: 20μs ON→OFF: 30μs	OFF→ON: 2μs ON→OFF: 3μs	OFF→ON: 0.5μs ON→OFF: 2.5μs

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

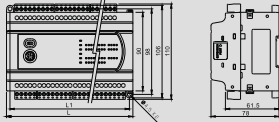
*2. Relay life: Resistive load -> more than 200,000 times; conductive load -> more than 80,000 times.

*1. Contact your sales representative for the official launch date of the left-side high-speed extension modules.
*2. DVP32EH00R2-L & DVP32EH00T2-L are also compatible with the left-side high-speed extension modules.



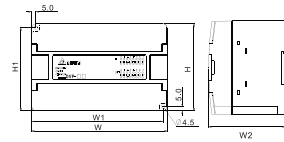
ES2/EX2 Series MPU

Model name (mm)	L	L1
DVP16ES200R/T	105	97
DVP24ES200R/T	125	117
DVP32ES200R/T	145	137
DVP32ES211T	145	137
DVP40ES200R/T	165	157
DVP60ES200R/T	225	217
DVP20EX200R/T	145	137



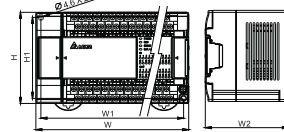
ES/EX Series MPU

Model name (mm)	H	H1	W	W1	W2
DVP14ES00R2/T2	100	95	104	99	82
DVP24ES00(11)R2/T2	100	95	155	150	82
DVP30ES00R2/T2	100	95	155	150	82
DVP32ES00R2/T2	100	95	155	150	82
DVP40ES00R2/T2	100	95	155	150	82
DVP60ES00R2/T2	100	85.5	185	180.5	89.6
DVP20EX00(11)R2/T2	100	95	155	150	82



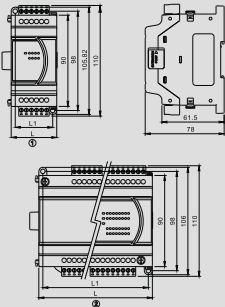
EH2 Series MPU

Model name (mm)	H	H1	W	W1	W2
DVP16EH00R2/T2	90	80	113	103	82
DVP20EH00R2/T2	90	80	113	103	82
DVP32EH00M2	90	80	143.5	133.5	82
DVP32EH00R2/T2	90	80	143.5	133.5	82
DVP32EH00R2-L	90	80	143.5	133.5	82
DVP32EH00T2-L	90	80	143.5	133.5	82
DVP40EH00R2/T2	90	80	158.8	153.8	82
DVP48EH00R2/T2	90	80	174	164	82
DVP64EH00R2/T2	90	80	212	202	82
DVP80EH00R2/T2	90	80	276	266	82



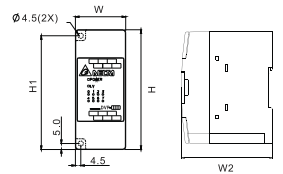
ES2/EX2 Series Extension Modules

Model name (mm)	L	L1	Type
DVP08XM211N	45	37	○
DVP08XP211R/T	45	37	○
DVP08XN211R/T	45	37	○
DVP16XM211N	70	62	○
DVP16XP211R/T	70	62	○
DVP16XN211R/T	70	62	○
DVP24XP200R/T	145	137	○
DVP24XN200R/T	145	137	○
DVP32XP200R/T	145	137	○
DVP04AD-E2	70	62	○
DVP02DA-E2	70	62	○
DVP04DA-E2	70	62	○
DVP06XA-E2	70	62	○
DVP04PT-E2	70	62	○
DVP04TC-E2	70	62	○



ES/EX Series Extension Modules

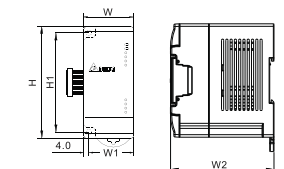
Model name (mm)	H	H1	W	W1	W2
DVP08XM11N	100	95	42	37.5	82
DVP16XM11N	100	95	104	99	82
DVP08XN11R/T	100	95	42	37.5	82
DVP16XN11R/T	100	95	155	150	82
DVP24XN11R/T	100	95	155	150	82
DVP24XN00R/T	100	95	155	150	82
DVP08XP11R/T	100	95	42	37.5	82
DVP24XP11R/T	100	95	155	150	82
DVP24XP00R/T	100	95	155	150	82
DVP32XP00R/T	100	95	155	150	82



EH2 Series Extension Modules

Model name (mm)	H	H1	W	W1	W2
DVP08HM11N	90	80	40	36	82
DVP16HM11N	90	80	55	51	82
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

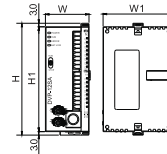


PM Series MPU

Model name (mm)	H	H1	W	W1	W2
DVP20PM00D	90	80	174	164	82
DVP20PM00M	90	80	174	164	82

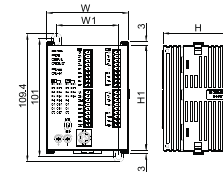
SS/SA/SX/SC/SS2/SA2 Series MPU

Model name (mm)	H	H1	W	W1
DVP14SS11R2/T2	96	90	25.2	60
DVP14SS211R/T	96	90	25.2	60
DVP12SA11R/T	96	90	37.4	60
DVP12SA211R/T	96	90	37.4	60
DVP10SX11R/T	96	90	37.4	60
DVP12SC11T	96	90	37.4	60



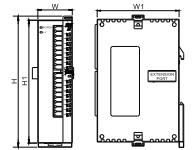
SV/SX2 Series MPU

Model name (mm)	H	H1	W	W1
DVP28SV11R/T	60	90	70	53.2
DVP28SX211R/T/S	60	90	70	53.2



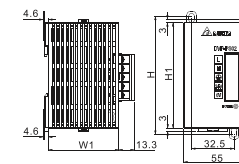
S Series Extension Modules

Model name (mm)	H	H1	W	W1
DVP08SM11N	96	90	25.2	60
DVP06SN11R	96	90	25.2	60
DVP08SN11R/T	96	90	25.2	60
DVP08SP11R/T	96	90	25.2	60
DVP16SP11R/T	96	90	25.2	60
DVP04AD-S	96	90	25.2	60
DVP06AD-S	96	90	25.2	60
DVP02DA-S	96	90	25.2	60
DVP04DA-S	96	90	25.2	60
DVP06XA-S	96	90	25.2	60
DVP04PT-S	96	90	25.2	60
DVP04TC-S	96	90	25.2	60
DVP01PU-S	96	90	25.2	60
DVPDT01-S	96	90	25.2	60



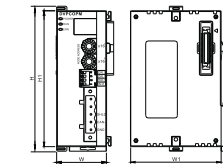
PS01/02 Power Supply Modules

Model name (mm)	H	H1	W	W1
DVPPS01	100	90	38.5	60
DVPPS02	100	90	55	60



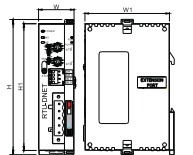
Left-Side High-Speed Extension Modules

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
DVP04AD-SL	96	90	33.1	60
DVP04DA-SL	96	90	33.1	60
DVP02LC-SL	96	90	33.1	60

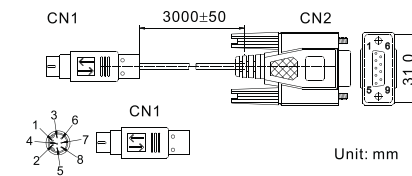


Remote I/O Modules

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-PT01	96	90	25.2	60



PIN Definition of DVPACAB2A30



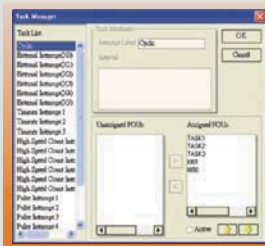
PC/HMI COM Port	PLC COM1 Port
9 PIN D-SUB female	8 PIN MINI DIN
Tx 3	Rx 4
Rx 2	Tx 5
GND 5	GND 8
	1,2 5V



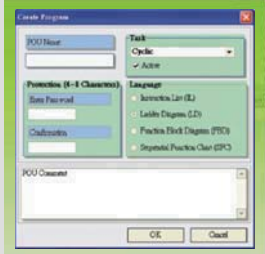
ISPSOft 1.0

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.

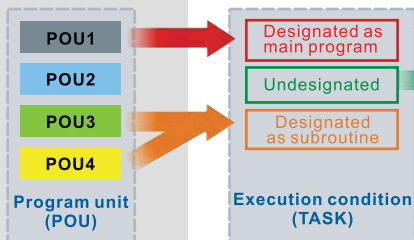
Task Designation



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.



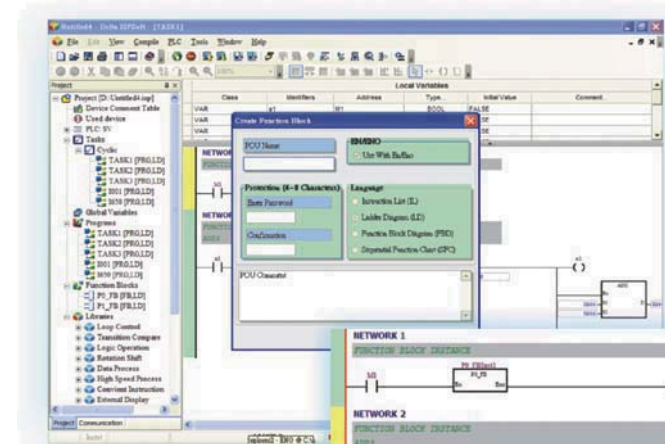
To create new cyclic or interruption programs, you have to create new POU and designate TASK first. Undesignated POU will not be executed.



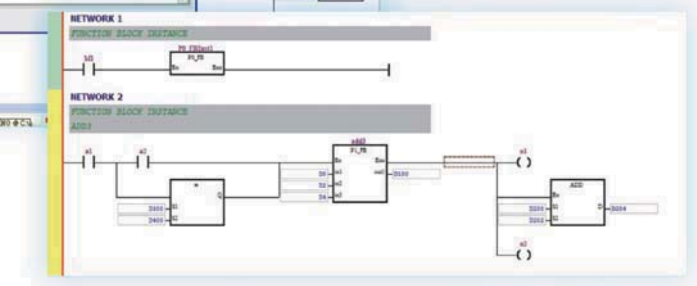
The program structure can be managed and the execution arranged and handled in easier way.

Function Block

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

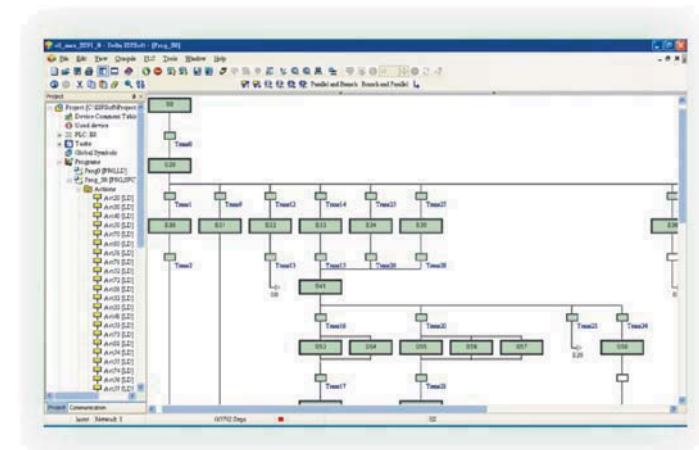


The function block can be made and used freely in the program. Use import/export function to apply the block in different programs. Particularly when many programs require the same function, the function block helps increase the efficiency of program editing.



SFC Chart

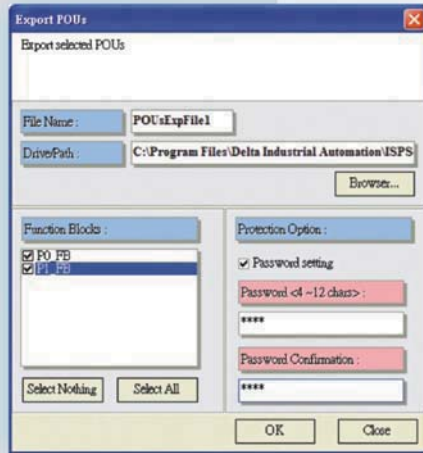
Direct editing of SFC chart allows faster and handier programming process.





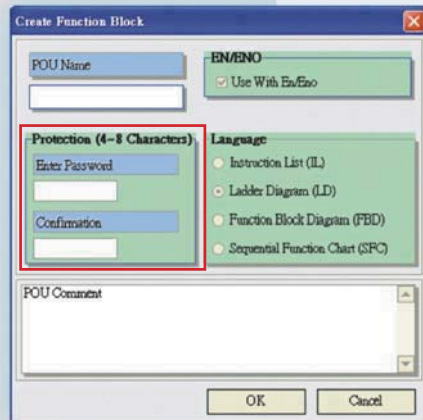
ISPSOft 1.0

Function Block Import/Export



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.



Variable Declaration

Global variable: Separate from 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.

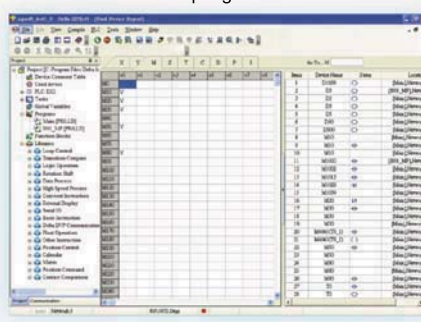
When writing the function block, it is suggested that the variable be configured by the system itself to increase the independency of the block.

Identifiers	Address	Type	Initial Value	Comment
A1		BOOL	FALSE	
A2		BOOL	FALSE	
I1		BOOL	FALSE	
A2		BOOL	FALSE	
TEMP		WORD	0	
PL_FBstart		PL_FB		
A11		PL_FB		
A102		PL_FB		

Designate corresponding physical I/O points

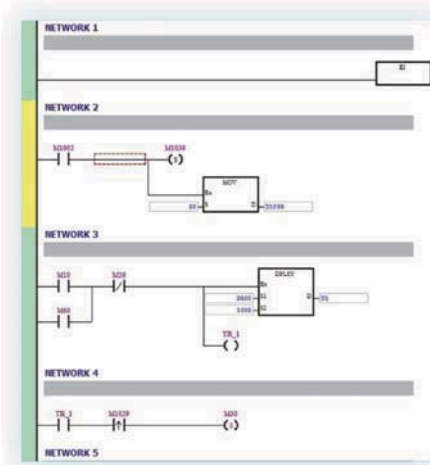
Device List

The device list helps the user to know clearly all the devices used in the program.



Structural Editing

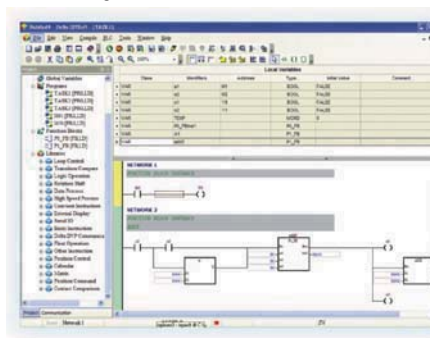
Every section of the program is composed of many networks. ISPSOft provides many kinds of components for the user to drag for use.



The user can enable/disable every network to trial run or debug the program and clarify the program structure.

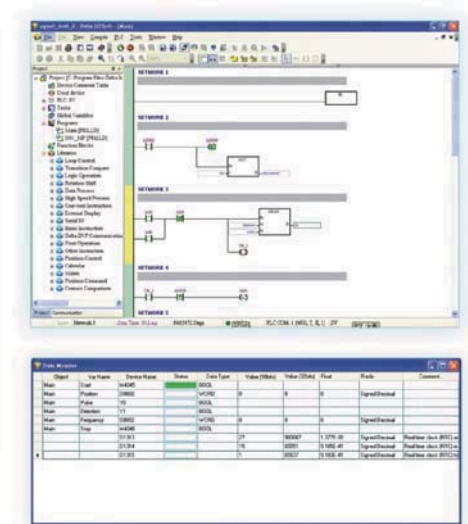
Flexible Use of Components

Drag the components in the function library to use for editing.



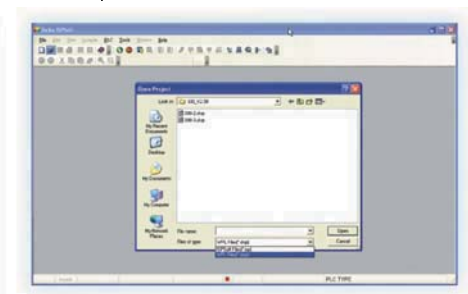
Complete Monitoring

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



Compatible with WPLSoft

The user can convert the file edited in WPLSoft to be compatible with ISPSOft.

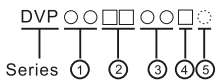


Ordering Information



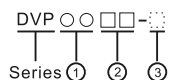
Model Name Explanation

● MPU



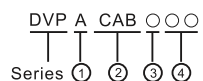
- Total I/O points
- Model
ES/ES2 : ES/ES2 series MPU
EX/EX2 : EX/EX2 series MPU
SS/SS2 : SS/SS2 series MPU
SA/SA2 : SA/SA2 series MPU
SX/SX2 : SX/SX2 series MPU
SC : SC series MPU
SV : SV series MPU
PM : PM series MPU
EH : EH series MPU
- Power supply
00 : AC power input
11 : DC power input
- Output type
R : Relay
T : Transistor (NPN)
M : Mixed with differential signal
S : Transistor (PNP)
- Version

● PI/PO Module



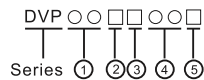
- Total I/O points
- Model
HC : High-speed counter
PU : Single-axis positioning module
- Model
H : For EH/EH2/PM series MPU
S : For SS/SA/SX/SC/SV series MPU
For SS2/SA2/SX2/SC/SV series MPU
SL : left-side extension for SV series MPU

● Accessory: Cable



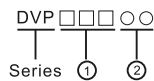
- Accessory
- Type
CAB : Cable
- Type
1, 2, 3, 4,
- Length
15 : 1.5m
30 : 3.0m

● DI/DO Module



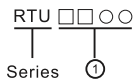
- Total I/O points
- Model
X : For ES/EX/ES2/EX2 series MPU
S : For SS/SA/SX/SC/SV series MPU
For SS2/SA2/SX2/SC/SV series MPU
H : For EH/EH2/PM series MPU
- I/O type
M : Input point
N : Output point
P : Input + output
- Power supply
00 : AC power input
11 : DC power input
- Output type
R : Relay
T : Transistor (NPN)
TS : Transistor (PNP)

● Peripherals



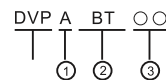
- Product name
HPP : Handheld programming panel
DU : Digital display panel
- Type/function
01 : Type 01
02 : Type 02
03 : Type 03

● Remote I/O



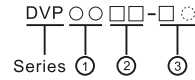
- Model
DNET : DeviceNet
485 : RS-485
EN01 : Modbus TCP

● Accessory: Other



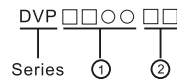
- Accessory
- Type
Bt : Battery
- Type : 01, 02

● AI/AO Module



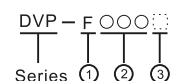
- Total I/O points
- Model
AD : Analog/digital conversion
DA : Digital/analog conversion
PT : PT100 type temperature module
TC : Thermocouple type temperature Module
XA : AD + DA module
- Model
S : For SS/SA/SX/SC/SV series MPU
For SS2/SA2/SX2 series MPU
H : For EH/EH2/PM series MPU
H2 : For EH2 series MPU
SL : For MPU with left-side interface
E : For ES/EX series MPU
E2 : For ES2/EX2 series MPU

● Network Module



- Model
EN01 : Modbus TCP
DNET : DeviceNet master
COPM : CANopen master
CP02 : CANopen master
DT01/02 : DeviceNet master
PF01/02 : PROFIBUS DP master
- Model
SL : left-side extension for SV series MPU
H2 : For EH2 series MPU
S : For Slim series MPU

● Function Card



- Function Card
- Type
232 : RS-232 card
422 : RS-422 card
2OT : 2DO card, transistor output...
- Particular definition
S : Slave mode
(applicable to COM3 coding only)

Select A Suitable PLC

Select your desired specifications and locate the most suitable MPU.

Item	Spec.	Check	Model							
			ES2	EX2	EH2	SS2	SA2	SX2	SV	
Power supply	AC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
	DC	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
I/O points	< 256	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
	< 512	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Program capacity	< 8k	<input type="checkbox"/>			<input checked="" type="checkbox"/>					
	< 16k	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Output type	Transistor (NPN)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Transistor (PNP)	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Relay	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Differential signal	<input type="checkbox"/>			<input checked="" type="checkbox"/>					
Communication	3 COM ports (RS-232/485)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	Ethernet	<input type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DeviceNet	<input type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	CANopen	<input type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	PROFIBUS	<input type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Positioning	2-axis output	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	4-axis output	<input type="checkbox"/>			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	
	> 4 axes	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	2-axis interpolation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	200kHz high speed	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
High-speed counting	< 2 channels	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	> 2 channels	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	200kHz high speed	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Analog function	< 4 channels (AD)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	< 2 channels (DA)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



Note:

- : With such specification
- : Varies upon model
- : With such specification when connected to extension module
- *1 : S series and EH2 series support only slave. SV/SX2/SA2 series support both master and slave.
- *2 : EX/SX2 series have 4 channels of analog input and 2 channels of analog output.
- *3 : Besides the built-in 6 channels of high-speed counters, EH2 series can be connected to high-speed counter modules.



Ordering Information





ES/EX Series MPU

Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates	
ES series standard MPU	100~240VAC	Relay	8	6	DVP14ES00R2	 	
	100~240VAC	Transistor	8	6	DVP14ES00T2		
	100~240VAC	Relay	16	8	DVP24ES00R2		
	100~240VAC	Transistor	16	8	DVP24ES00T2		
	100~240VAC	Relay	18	12	DVP30ES00R2		
	100~240VAC	Transistor	18	12	DVP30ES00T2		
	100~240VAC	Relay	16	16	DVP32ES00R2		
	100~240VAC	Transistor	16	16	DVP32ES00T2		
	100~240VAC	Relay	24	16	DVP40ES00R2		
	100~240VAC	Transistor	24	16	DVP40ES00T2		
	100~240VAC	Relay	36	24	DVP60ES00R2		
	100~240VAC	Transistor	36	24	DVP60ES00T2		
	EX series analog MPU	100~240VAC	Relay	8	6		DVP20EX00R2
			Analog	4	2		
100~240VAC		Transistor	8	6	DVP20EX00T2		
		Analog	4	2			
24VDC		Relay	8	6	DVP20EX11R2		
		Analog	4	2			



ES/EX Series Digital/Analog Module

Product name	Output method	Inputs	Outputs	Model name	Certificates
Digital module	-	8	-	DVP08XM11N	 
	Relay	-	8	DVP08XN11R	
	Transistor	-	8	DVP08XN11T	
	-	16	-	DVP16XM11N	
	Relay	-	16	DVP16XN11R	
	Transistor	-	16	DVP16XN11T	
	Relay	-	24	DVP24XN11R	
	Transistor	-	24	DVP24XN11T	
	Relay	4	4	DVP08XP11R	
	Transistor	4	4	DVP08XP11T	
	Relay	16	8	DVP24XP11R	
	Transistor	16	8	DVP24XP11T	
	Relay	16	8	DVP24XP00R	
	Relay	-	24	DVP24XN00R	
	Transistor	-	24	DVP24XN00T	
	Relay	16	16	DVP32XP00R	
	Transistor	16	16	DVP32XP00T	
	Relay	16	16	DVP32XP11R	
	Transistor	16	16	DVP32XP11T	

EC3 Series MPU



Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates		
EC3 series standard MPU	100~240VAC	Relay	6	4	DVP10EC00R3	 		
	100~240VAC	Transistor	6	4	DVP10EC00T3			
	100~240VAC	Relay	8	6	DVP14EC00R3			
	100~240VAC	Transistor	8	6	DVP14EC00T3			
	100~240VAC	Relay	8	8	DVP16EC00R3			
	100~240VAC	Transistor	8	8	DVP16EC00T3			
	100~240VAC	Relay	12	8	DVP20EC00R3			
	100~240VAC	Transistor	12	8	DVP20EC00T3			
	100~240VAC	Relay	12	12	DVP24EC00R3			
	100~240VAC	Transistor	12	12	DVP24EC00T3			
	100~240VAC	Relay	18	12	DVP30EC00R3			
	100~240VAC	Transistor	18	12	DVP30EC00T3			
	100~240VAC	Relay	16	16	DVP32EC00R3			
	100~240VAC	Transistor	16	16	DVP32EC00T3			
	100~240VAC	Relay	24	16	DVP40EC00R3			
	100~240VAC	Transistor	24	16	DVP40EC00T3			
	100~240VAC	Relay	36	24	DVP60EC00R3			
	100~240VAC	Transistor	36	24	DVP60EC00T3			
	Fastest execution time of basic instructions		3.8µs	Execution time of MOV instruction			5.04µs	

ES2/EX2 Series MPU

Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates
ES2 series standard MPU	100~240VAC	Relay	8	8	DVP16ES200R	 
	100~240VAC	Transistor	8	8	DVP16ES200T	
	100~240VAC	Relay	16	8	DVP24ES200R	
	100~240VAC	Transistor	16	8	DVP24ES200T	
	100~240VAC	Relay	16	16	DVP32ES200R	
	100~240VAC	Transistor	16	16	DVP32ES200T	
	24VDC	Transistor	16	16	DVP32ES211T *1	
	100~240VAC	Relay	24	16	DVP40ES200R	
	100~240VAC	Transistor	24	16	DVP40ES200T	
	100~240VAC	Relay	36	24	DVP60ES200R	
	100~240VAC	Transistor	36	24	DVP60ES200T	
	EX2 series analog MPU	100~240VAC	Relay	8	6	
Analog			4	2		
100~240VAC		Transistor	8	6	DVP20EX200T	
Fastest execution time of basic instructions		0.35µs	Execution time of MOV instruction		3.4µs	

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

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

Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates
ES2/EX2 digital module	100~240VAC	Relay	-	24	DVP24XN200R	 
	100~240VAC	Transistor	-	24	DVP24XN200T	
	100~240VAC	Relay	16	8	DVP24XP200R	
	100~240VAC	Transistor	16	8	DVP24XP200T	
	100~240VAC	Relay	16	16	DVP32XP200R	
	100~240VAC	Transistor	16	16	DVP32XP200T	

Ordering Information



ES2/EX2 Series Digital / Analog Module (DC24V)

Product name	Output method	Inputs	Outputs	Model name	Certificates
ES2/EX2 series 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		
ES2/EX2 series analog I/O module	<ul style="list-style-type: none"> 4 points of analog voltage ($\pm 10V, \pm 5V$) / current ($\pm 20mA, 0\sim 20mA, 4\sim 20mA$) input *1 Resolution: 14-bit ($-32,000\sim +32,000$) 			DVP04AD-E2	
	<ul style="list-style-type: none"> 4 points of analog voltage ($-10V\sim +10V$) / current ($0\sim 20mA, 4\sim 20mA$) output Resolution: 14-bit ($-32,000\sim +32,000$) / ($0\sim +32,000$) 			DVP04DA-E2	
	<ul style="list-style-type: none"> 2 points of analog voltage ($-10V\sim +10V$) / current ($0\sim 20mA, 4\sim 20mA$) output *1 Resolution: 14-bit ($-32,000\sim +32,000$) / ($0\sim +32,000$) 			DVP02DA-E2	
	<ul style="list-style-type: none"> 4 points of analog voltage ($\pm 10V, \pm 5V$) / current ($\pm 20mA, 0\sim 20mA, 4\sim 20mA$) input *1 Input resolution: 14-bit ($-32,000\sim +32,000$) 2 points of analog voltage ($-10V\sim +10V$) / current ($0\sim 20mA, 4\sim 20mA$) output Output resolution: 14-bit ($-32,000\sim +32,000$) / ($0\sim +32,000$) 			DVP06XA-E2	
DVP-ES2/EX2 series temperature measurement module	<ul style="list-style-type: none"> 4 points of platinum RTD (Pt100, Pt1000, Ni100, Ni1000) sensor input / $0\sim 300\Omega$ resistance input *1 Resolution: 16-bit With PID temperature control 			DVP04PT-E2	
	<ul style="list-style-type: none"> 4 points of thermocouple (J, K, R, S, T, E, N Type) sensor input / $-80mV\sim +80mV$ voltage input *1 Resolution: 20-bit With PID temperature control 			DVP04TC-E2	

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

EH2 Series MPU

Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates	
EH2 series standard MPU	100~240VAC	Relay	8	8	DVP16EH00R2	 	
	100~240VAC	Transistor	8	8	DVP16EH00T2		
	100~240VAC	Relay	12	8	DVP20EH00R2		
	100~240VAC	Transistor	12	8	DVP20EH00T2		
	100~240VAC	Built-in 2-axis of independent 200kHz pulse output					
		Transistor		16	16		DVP32EH00T2
	100~240VAC	Built-in 2-axis of independent 200kHz pulse output					
		Relay		16	16		DVP32EH00R2
	100~240VAC	Differential	16	16	DVP32EH00M2		
	100~240VAC	Relay		16	16		DVP32EH00R2-L
		Transistor		16	16		DVP32EH00T2-L
	100~240VAC	Built-in 4-axis of independent 200kHz pulse output					
		Transistor		24	16		DVP40EH00T2
	100~240VAC	Relay		24	16		DVP40EH00R2
	100~240VAC	Relay		24	24		DVP48EH00R2
	100~240VAC	Transistor		24	24		DVP48EH00T2
	100~240VAC	Relay		32	32		DVP64EH00R2
	100~240VAC	Transistor		32	32		DVP64EH00T2
	100~240VAC	Relay		40	40		DVP80EH00R2
	100~240VAC	Transistor		40	40		DVP80EH00T2
Execution time of basic instructions			0.24μs				

EH2 Series Digital/Analog Module

Product name	Output method	Inputs	Outputs	Model name	Certificates
Digital module	Relay	4	4	DVP08HP11R	
	Relay	4	4	DVP08HP11T	
	Relay	-	8	DVP08HN11R	
	Transistor	-	8	DVP08HN11T	
	-	8	-	DVP08HM11N	
	Relay	8	8	DVP16HP11R	
	Transistor	8	8	DVP16HP11T	
	-	16	-	DVP16HM11N	
	Relay	-	32	DVP32HN00R	
	Transistor	-	32	DVP32HN00T	
	Relay	16	16	DVP32HP11R	
	Transistor	16	16	DVP32HP11T	
Analog module	Relay	24	24	DVP48HP00R	
	Transistor	24	24	DVP48HP00T	
	<ul style="list-style-type: none"> 4 points of analog voltage ($-10V\sim +10V$)/current ($-20mA\sim +20mA$) *1 Input resolution: 14-bit Built-in RS-485 interface 			DVP04AD-H2	
	<ul style="list-style-type: none"> 4 points of analog voltage ($0V\sim +10V$)/current ($0mA\sim +20mA$) output *1 Resolution: 12-bit Built-in RS-485 interface 			DVP04DA-H2	
	<ul style="list-style-type: none"> 4 points of analog voltage ($-10V\sim +10V$)/current ($-20mA\sim +20mA$) input 2 points of analog voltage ($0V\sim +10V$)/current ($0mA\sim +20mA$) output Resolution: 12-bit Built-in RS-485 interface 			DVP06XA-H2	
	<ul style="list-style-type: none"> 4 points of platinum RTD (PT100) sensor input *1 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 type) sensor input *1 Resolution: 0.1°C Built-in RS-485 interface 			DVP04TC-H2		

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

EH2 Series Extension Module / Function Card

Product name	Output method	Inputs	Outputs	Model name	Certificates
Positioning module	• Servo position control module (single axis, 200kHz)			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	
	RS-232 port conversion (COM2)			DVP-F232	
	RS-422 port conversion (COM2)			DVP-F422	
Function card	RS-232 port extension (COM3)			DVP-F232S	
	RS-485 port extension (COM3)			DVP-F485S	
	<ul style="list-style-type: none"> 2 points of analog voltage ($0\sim 10V$)/current ($0\sim 20mA$) input Resolution: 12-bit 			DVP-F2AD	
	<ul style="list-style-type: none"> 2 points of analog voltage ($0\sim 10V$)/current ($0\sim 20mA$) output Resolution: 12-bit 			DVP-F2DA	
	4 points of digital input			DVP-F4IP	
	2 points of transistor output			DVP-F2OT	
	8 points of digital switch input			DVP-F8ID	
	6 points of analog switch input			DVP-F6VR	
	Frequency measurement card			DVP-F2FR	
	Digital display panel	Displays data in register and real-time clock.			

For more detailed specifications, visit: <http://www.delta.com.tw/industrialautomation> for all user's manuals of DVP-PLC.

Ordering Information



S Series MPU

Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates
SS series standard MPU	24VDC	Relay	8	6	DVP14SS11R2	
	24VDC	Transistor	8	6	DVP14SS11T2	
SA series advance MPU	24VDC	Relay	8	4	DVP12SA11R	
	24VDC	Transistor	8	4	DVP12SA11T	
SX series analog MPU	24VDC	Relay	6 (2AI)	4 (2AO)	DVP10SX11R	
	24VDC	Transistor	6 (2AI)	4 (2AO)	DVP10SX11T	
SC series positioning MPU	24VDC	Transistor	8	4	DVP12SC11T	
Execution time of basic instructions		3.8µs		Execution time of MOV instruction		5.04µs
Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates
SS2 series standard MPU	24VDC	Relay	8	6	DVP14SS211R	
	24VDC	Transistor	8	6	DVP14SS211T	
SA2 series advance MPU	24VDC	Relay	8	4	DVP12SA211R	
	24VDC	Transistor	8	4	DVP12SA211T	
SX2 series analog MPU	24VDC	Relay	8 (4AI)	6(2AO)	DVP20SX211R	
	24VDC	Transistor (NPN)	8 (4AI)	6(2AO)	DVP20SX211T	
	24VDC	Transistor (PNP)	8 (4AI)	6(2AO)	DVP20SX211S	
Fastest execution time of basic instructions		0.35µs		Execution time of MOV instruction		3.4µs
Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates
SV series functional MPU	24VDC	Relay	16	12	DVP28SV11R	
	24VDC	Transistor	16	12	DVP28SV11T	
Execution time of basic instructions		0.24µs				

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	
	Relay	4	4	DVP08SP11R	
	Transistor	4	4	DVP08SP11T	
	-	8	-	DVP08SM11N	
	-	8	-	DVP08SM10N	
	Digital switch	8	-	DVP08ST11N	
	Relay	8	8	DVP16SP11R	
	Transistor (NPN)	8	8	DVP16SP11T	
	Transistor (PNP)	8	8	DVP16SP11TS	
	-	16	-	DVP16SM11N	
	Transistor, Pin header	-	32	DVP32SN11TN	
	Pin header	-	32	DVP32SM11N	
	Analog I/O module	• 4 points of analog input voltage (-10V~+10V)/current (-20mA~+20mA) *1 • Input resolution: 14-bit • Built-in RS-485 interface			
• 4 points of analog input voltage (0V~+10V)/current (0mA~+20mA) *1 • Resolution: 12-bit • Built-in RS-485 interface				DVP04DA-S	
• 2 points of analog input voltage (0V~+10V)/current (0mA~+20mA) *1 • Resolution: 12-bit • Built-in RS-485 interface				DVP02DA-S	
• 6 points of analog input voltage (-10V~+10V)/current (-20mA~+20mA) *1 • Input resolution: 14-bit • Built-in RS-485 interface				DVP06AD-S	
• Analog input+output module (6 points) • 4 points of analog input voltage (-10V~+10V)/current (-20mA~+20mA) • 2 points of analog input voltage (0V~+10V)/current (0mA~+20mA) • Resolution: 12-bit • Built-in RS-485 interface				DVP06XA-S	

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

Product name	Power supply	Inputs	Outputs	Model name	Certificates
Left-side high-speed analog I/O module	• 4 groups of analog input *1 • Signal range: 1~5 V, 0~5 V, -5~5V, 0~10 V, -10~10 V, 4~20mA, 0~20mA, -20~20mA • Resolution: 16-bit • Single channel On/Off setup enhances entire conversion efficiency. • Conversion time: 250µs/point • Off-line alarm (1~5 V, 4~20mA)			DVP04AD-SL	
	• 4 groups of analog input *1 • Signal range: 0~10 V, -10~10 V, 4~20mA, 0~20mA • Resolution: 16-bit • Offers single channel On/Off setup • Conversion time: 250µs/point			DVP04DA-SL	
Left-side high-speed load cell module	• 2 load cell modules *1 • Resolution: 20-bit • Connectable to 4-wire/6-wire load cell sensor • Measurable range: 0~6mV/V			DVP02LC-SL	
Temperature measurement module	• 4 points of platinum RTD (PT100) sensor input *1 • Resolution: 0.1°C • Built-in RS-485 interface			DVP04PT-S	
	• 4 points of thermocouple (J、K、R、S、T type) sensor input *1 • Resolution: 0.1°C • Built-in RS-485 interface			DVP04TC-S	
Positioning module	Servo position control module (single axis, 200kHz)			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, 10/100Mbps			DVPEN01-SL	
	DeviceNet master communication module, 500kbps			DVPNET-SL	
	CANopen master communication module, 1Mbps			DVPCOPM-SL	
Remote I/O module	RS-485 remote I/O module, connectable to S series I/O modules			RTU-485	
	Ethernet remote I/O module, connectable to S series I/O modules			RTU-EN01	
	DeviceNet remote I/O module, connectable to S series I/O modules			RTU-DNET	
	PROFIBUS remote I/O module, connectable to S series I/O modules			RTU-PD01	

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

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	
	Modbus TCP to RS-232/485 converter	IFD9506	
	EtherNet/IP to RS-232/485 converter	IFD9507	
	DeviceNet to RS-232/485 converter	IFD9502	
	CANopen to RS-232/485 converter	IFD9503	
	RS-232 to RS-485/422 isolated converter	IFD8500	
	RS-485 to RS-422 isolated repeater	IFD8510	
	RS-485/422 to RS-232 addressable isolated converter	IFD8520	

Ordering Information



PM Series

Product name	Power supply	Output method	Inputs	Outputs	Model name	Certificates
Professional motion control MPU	100~240VAC	Differential	8	8	DVP20PM00D	
		(Built-in 2-axis of independent 500kHz pulse output)			DVP20PM00M	
		(Built-in 3-axis of independent 500kHz pulse output)				
PM series extension module	Description				Model name	
Communication card	Ethernet/CANopen communication card				DVP-FPMC	
Memory card	Data backup memory card (64k words)				PM-PCC01	
Execution time of basic instructions		3.3μs	Execution time of MOV instruction		3.74μs	

TP Series

Product name	Description	Model name	Certificates
TP02	Resolution: 160 x 32 dots, Serial COM ports: RS-232 & RS-485	TP02G-AS1	
TP04	Resolution: 128 x 64 dots, Serial COM ports: RS-232 & RS-485/RS-422	TP04G-AS2	
	Resolution: 192 x 64 dots, Serial COM ports: RS-232 & RS-485/RS-422	TP04G-AL2	
	Resolution: 192 x 64 dots, Serial COM ports: RS-232	TP04G-AL-C	
TP08	Resolution: 192 x 64 dots, Serial COM ports: RS-232, 0~9 numeric keys available	TP04G-BL-C	
	Resolution: 240 x 128 dots, Serial COM ports: RS-232 & RS-485/RS-422, 0~9 numeric keys available	TP08G-BT2	

Peripheral Accessories

Product name	Description	Model name	Certificates
Accessory	Handheld programming panel	DVPHPP02	
	Data backup memory card (built-in 1 in DVPHPP01)	DVP-256FM	
	Data backup memory card (64k words)	DVP-PCC01	
	Communication cable for DVP-HPP series and PLC, 1.5m	DVPACAB115	
	Communication cable for PC (9-pin & 25-pin D-Sub) and PLC, 1.5m	DVPACAB215	
	Communication cable for PC (9-pin D-Sub) and PLC, 1.5m	DVPACAB2A30	
	Communication cable for PC (9-pin & 25-pin D-Sub) and PLC, 3m	DVPACAB230	
	I/O connection cable for DVP-32SM series	DVPACAB7A10	
	I/O connection cable for DVP-32SN series	DVPACAB7B10	
	Drive board for DVP-32SM series (32 points of output)	DVPAETB-ID32A	
	Drive board for DVP-32SN series (16 points of input)	DVPAETB-OR16A	
	Connection cable for DVP-HPP series and PC	DVPACAB315	
	Supports 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 ES/EX series, 30cm	DVPACAB403	
	Extension cable connector for EH series MPU and extension module	DVPAEXT01-H	
	Extension cable for EH series MPU and extension module, 0.9m	DVPACAB4A09	
	Extension cable for EH series MPU and extension module, 1.8m	DVPACAB4A18	
	DeviceNet/CANopen distribution box, 1 for 2	TAP-CN01	
	DeviceNet/CANopen distribution box, 1 for 4	TAP-CN02	
	DeviceNet/CANopen distribution box, 1 for 4, RJ45 connector	TAP-CN03	
	3.6V lithium battery (unchargeable) for EH/SA/SX series MPU	DVPABT01	
	Terminal resistance for CANopen communication	TAP-TR01	
	TP Programmer Cable	DVPACAB530	

Software

Product name	Description	OS (Windows base software)
WPLSoft	Programming software for DVP-PLC	Windows 98, Me, NT4.0, 2000, XP, Vista, Windows 7(32-bit/64-bit)
ISPSoft	Programming software for DVP-PLC	Windows 2000, XP, Vista, Windows 7(32-bit/64-bit)
TPEditor	Editing software for TP series text panel	Windows 98, Me, NT4.0, 2000, XP, Vista, Windows 7(32-bit/64-bit)
PMSoft	Programming software for PM series	Windows 2000, XP, Vista
DCISoft	Delta communication integration software DVPEN01-SL, RTU-EN01, IFD9506, IFD9507	Windows 2000, XP, Vista, Windows 7(32-bit/64-bit)
DeviceNetBuilder	DeviceNet configuration software	Windows 2000, XP
CANopenBuilder	CANopen configuration software	Windows 2000, XP
DMT	VB, VC, DLL library for DVP-PLC	Windows 2000, XP, Vista, Windows 7(32-bit/64-bit)

Industrial Power Supply

Product name	Power supply	Inputs	Outputs	Model name	Certificates
DVP series	1-phase	85 ~ 264 VAC	24V	DVPPS01	
				DVPPS02	
DRP series	1-phase	85 ~ 264 VAC/120~375 VDC	12V	DRP012V015W1AZ	
				DRP012V030W1AZ	
				DRP012V060W1AZ	
				DRP012V100W1AZ	
	24V	85 ~ 264 VAC/120~375 VDC	24V	DRP024V060W1AZ	
				DRP024V060W1AA	
				DRP024V120W1AA	
				DRP024V240W1AA	
				DRP024V480W1AA	
				DRP024V060W3AA	
3-phase	320~575 VAC/450~800 VDC	24V	DRP024V120W3AA		
			DRP024V240W3AA		
			DRP024V480W3AA		
			DRP024V060W1AA		
			PMC-12V035W1AA		
			PMC-12V050W1AA		
PMC-12V100W1AA					
1-phase	85 ~ 264 VAC/120~375 VDC	24V	PMC-24V035W1AA		
			PMC-24V050W1AA		
			PMC-24V075W1AA		
			PMC-24V100W1AA		
			PMC-24V150W1AA		
			PMC-DSPV100W1A (dual output)		
5V					
24V					