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www.delta.com.tw/industrialautomation

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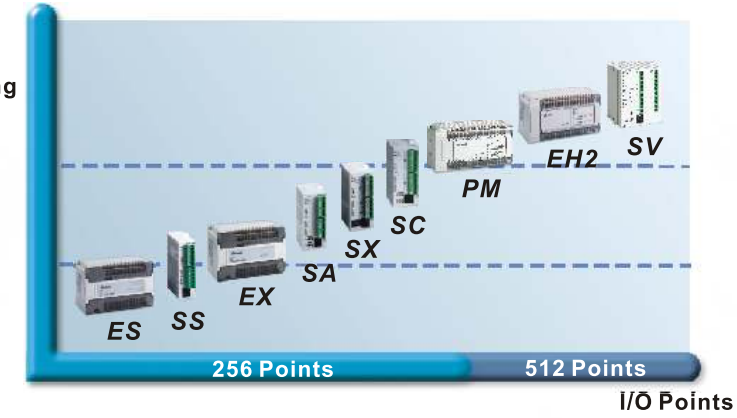
DELTA ELECTRONICS, INC.

DVP

DELTA Programmable Logic Controller

www.delta.com.tw/industrialautomation



DVP Series

Delta DVP series programmable logic controllers (PLC) are compact in size with outstanding performance, high capacity for program planning (Max. 16K steps) and can work with various function extension modules. All PLC MPUs have strong built-in communication functions and handy communication instructions. No extra communication modules are needed, Delta DVP PLCs is able to construct a complete control network with all Delta industrial automation products. Delta PLC MPUs satisfy all kinds of applications, e.g. MPU for basic sequential control, special MPU with built-in analog function or for motion controls and advanced MPU for heavy operation requirements. Delta's small PLCs also offer the most cost-effective solution that most meets your need.

E Series MPU

DVP-EX

- **Built-in 4-channel analog input and 2-channel analog output**
- **Integral communication functions**
- **Lowest-cost MPU of analog functions**

Specification & Performance

MPU points: 20(8DI/6DO, 4AI/2AO)
Max. I/O points: 238
Program capacity: 4K Steps
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol

High-Speed Pulse Output

Supports 2-point (Y0, Y1) independent high-speed pulse output, with frequency of up to 10KHz.

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

*Bandwidth refers to the max. counting bandwidth of a single counter.

Built-in Analog Input/Output

Analog Input		Analog Output	
Points	4	Points	2
Resolution	10-Bit	Resolution	8-Bit
Specification	-20~20mA or -10~10V	Specification	0~20mA or 0~10V

DVP-ES

- **High reliability**
- **Maximum 256 I/O points extendable**
- **Most economical solution to small PLC sequential control and communication monitoring**

Specification & Performance

MPU points: 14/24/32/40/60
Max. I/O points: 256
Program capacity: 4K Steps
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol

High-Speed Pulse Output

Supports 2-point (Y0, Y1) independent high-speed pulse output, with frequency of up to 10KHz.

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

*Bandwidth refers to the max. counting range of a single counter.

DVP-EH2

- **Outstanding operation performance**
- **Built-in large space for program and data storage**
- **Supports more than 203 application instructions**
- **2-axis linear/arc interpolation motion control**
- **Run with various selections of high-speed function extension modules/function cards for all kinds of real-time applications**

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 (for basic instruction)
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol.
Data register: 10,000 words
File register: 10,000 words

High-Speed Pulse Output

The pulse outputs 20-point and 32-point models support 2-point 200KHz pulse outputs (Y0, Y2).
The 40-point models support 2-group A, B phase 200KHz pulse outputs (Y0, Y1),(Y2, Y3) and 2-point 200KHz pulse output (Y4, Y6)

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	1	200KHz/20KHz	

* Bandwidth refers to the max. counting range of a single counter.

Outstanding Operation Performance

CPU + ASIC dual processors support floating point operations. The maximum execution speed of basic instructions can reach up to 0.24μs

Flexible Function Extension Modules / Function Cards

Multiple function extension modules/function cards contain additional functions of analog I/O, temperature measurement, single-axis motion control, high-speed counting and a 3rd series communication port, etc.

PLC EASY LINK

PLC EASY LINK allows users to link maximum 32 units to the network without having to install extra communication extension modules.

Linear/Arc Interpolation Motion Control

Supports the new linear/arc interpolation motion control instructions. Together with high-speed pulse outputs, DVP-EH2 is able to perform 2-axis synchronous control.

High-Speed Special Extension Module

Used together with the new special extension modules, DVP-EH2 is able to greatly shorten the data transmission time between MPU and its extension modules as well as enhancing the execution efficiency of the program.

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

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S Series MPU

DVP-SS

- Suitable for basic applications
- Compact size
- Can run with special extension modules

Specification & Performance

MPU points: 14
Max. I/O points: 238
Program capacity: 4K Steps
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol

High-Speed Pulse Output

Supports 2-point (Y0, Y1) independent high-speed pulse output, with frequency of up to 10KHz.

Supports PID Auto-tuning

After the operation is completed, the parameters will be saved actomatically.

Built-in 4-Group High-Speed Counter

1 phase 1		1 phase 2		2 phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
2/2	20KHz/10KHz	1	20KHz	1	4KHz

*Bandwidth refers to the max. counting range of a single counter.

DVP-SA

- Large program capacity to enhance operation performance
- Best extendability

Specification & Performance

MPU points: 12
Max. I/O points: 236
Program capacity: 8K Steps
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol

High-Speed Pulse Output

Supports 2-point (Y0, Y1) independent high-speed pulse output, with frequency of up to 50KHz (Y0) and 10KHz (Y1).

Maximum 8 Special Modules Extendable

For analog I/O, temperature measurement, input point DIP switch, Profibus/DeviceNet communication module, single-axis motion control.

Built-in High-Speed Counters

1 phase 1		1 phase 2		2 phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
2/4	20KHz/10KHz	1	20KHz	1	4KHz/25KHz

*Bandwidth refers to the max. counting range of a single counter.

DVP-SX

- Built-in 2-channel analog input and 2-channel analog output
- Can run with 8 special extension modules

Specification & Performance

MPU points: 10(4DI/2DO, 2AI/2AO)
Max. I/O points: 230
Program capacity: 8K Steps
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol

High-Speed Pulse Output

Supports 2-point (Y0, Y1) independent high-speed pulse output, with frequency of up to 50KHz (Y0) and 10KHz (Y1).

Built-in High-Speed Counters

1 phase 1		1 phase 2		2 phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
2/4	20KHz/10KHz	1	20KHz	1/1	4KHz/25KHz

*Bandwidth refers to the max. counting bandwidth of a single counter.

Built-in Analog I/O

Analog Input		Analog Output	
Points	2	Points	2
Resolution	12-Bit(V)/11-Bit(I)	Resolution	12-Bit
Specification	-20 ~ 20mA or -10 ~ 10V	Specification	-20 ~ 20mA or -10 ~ 10V

DVP-SC

- 100KHz high-speed pulse output and 100KHz pulse counting

Specification & Performance

MPU points: 12
Max. I/O points: 236
Program capacity: 8K Steps
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol

High-Speed Pulse Output

Supports 2-point (Y10, Y11) independent high-speed pulse output, with frequency of up to 100KHz (Total bandwidth:130KHz).

Supports Handy Position Control Instructions

By ZRN (zero return), DRVA (absolute position), and DRVI (relative position), DVP-SC is able to complete all kinds of motion controls by working with Delta servos.

Built-in 6-Group High-Speed Counter

1 phase 1		1 phase 2		2 phase 2	
Points	Bandwidth	Points	Bandwidth	Points	Bandwidth
2/4/2	20KHz/10KHz /100KHz	1/1	20KHz/100KHz	1/1	4KHz/50KHz

*Bandwidth refers to the max. counting bandwidth of a single counter.

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New MPU

DVP-PM

- 2-axis linear/arc interpolation motion control
- Maximum pulse output frequency: 500KHz
- Compatible with G-Code/M-Code

Model	Spec
DVP20PM00D	DC power supply, Input(points), Output(points), Relay output

Specification & Performance

MPU points: 16
Max. I/O points: 512
Program capacity: 64K Steps
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol
Data register: 10,000 words
*Latched

500KHz High-Speed Pulse Output

Built-in 2-group A, B phase differential signal output
X-axis pulse output: (FP0+, FP0-), (RP0+, RP0-)
Y-axis pulse output: (FP1+, Fp1-), (RP1+, RP1-)

Supports MPG and multiple external signal inputs

The direct input of external signals are able to complete real-time feedback and motion control.

Linear/Arc Interpolation Motion Control; Compatible with G-Code

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

Motion Control MPU, as well as Extension Module

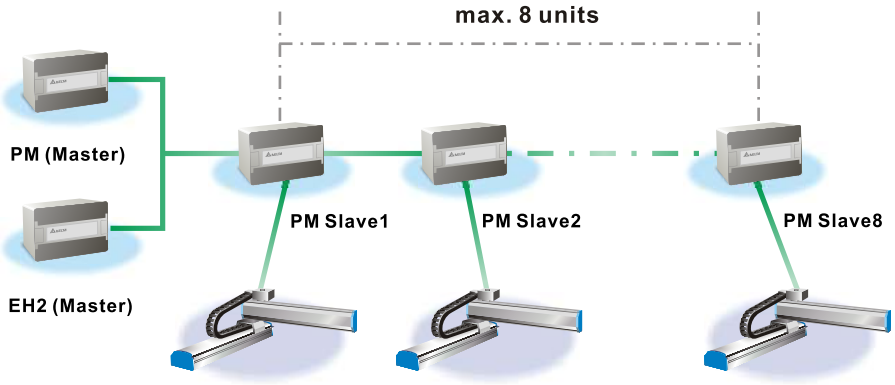
Apart from serving as an MPU for motion control operating independently, DVP-PM can further be the extension module with motion control for EH series MPU. The user has to pre-plan the motion schedule and upload it to DVP-PM (as slave) and EH series MPU only needs to give "start" and "stop" instructions. As an extension module, DVP-PM works independently and Does not affect the scan time of EH series MPU.

Compatible with the Function Extension Modules of EH Series MPU

DVP-PM offers flexible applications while being compatible with the points/function extension modules of EH series MPU.

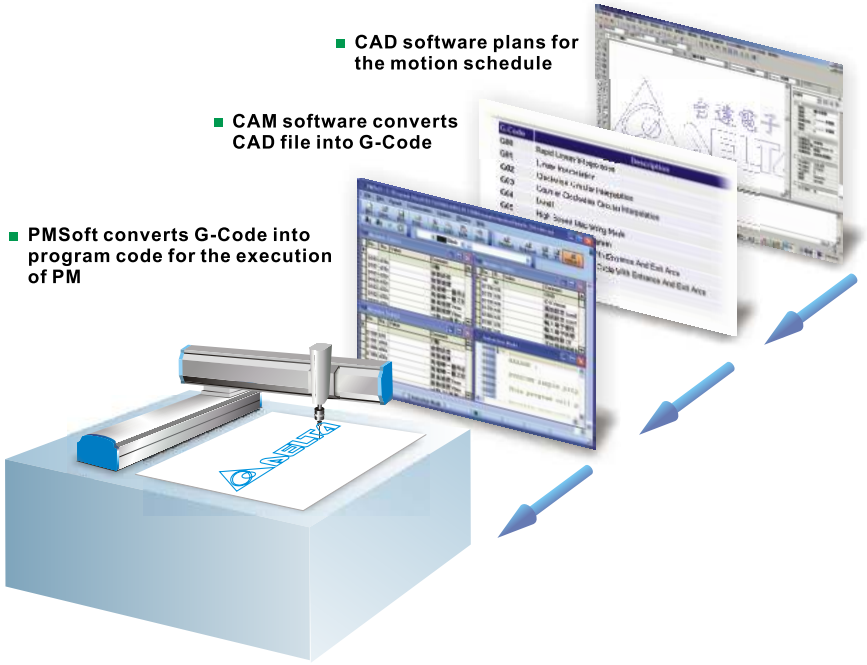
For more detailed specifications,
visit :http://www.delta.com.tw/industrialautomation for all user's manuals of DVP-PLC

Motion Control MPU , as well as Extension Module



Compatible with G-Code/M-Code

- CAD software plans for the motion schedule
- CAM software converts CAD file into G-Code
- PMSoft converts G-Code into program code for the execution of PM



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New MPU

DVP-SV

- **Outstanding Operation Performance**
- **High Program Planning Capacity**
- **Left-side High-speed Function Extension Interface**
- **Linear/Arc Interpolation Motion Control**

Specification & Performance

MPU points: 28
Max. I/O points: 512
Program capacity: 16K Steps
Instruction execution speed: 0.24μs (for basic instruction)
Communication port: Built-in RS-232 and RS-485, compatible with MODBUS ASCII/RTU communication protocol
Data register: 10,000 words
File register: 10,000 words

High-Speed Pulse Output

Supports 2-group (Y0, Y1) (Y2, Y3) A,B phase pulse output, with frequency of up to 200KHz.
Supports 2-point (Y4, Y6) high-speed pulse output, with frequency of up to 200KHz.

Outstanding Operation Performance

CPU + ASIC dual processors support floating point operations. The maximum execution speed of basic instructions can reach up to 0.24μs

Model	Spec
DVP28SV11R	DC 16 12 R
DVP28SV11T	DC 16 12 T

DC DC power supply Input(points) Output(points)
T Transistor output R Relay output

Left-side High-speed Function Extension Module

The parallel data transmission bus greatly enhances the efficiency of data exchange for real-time control. Special extension modules: Analog I/O, temperature measurement, single-axis motion control, DeviceNet Slave module, modem and Ethernet network module.

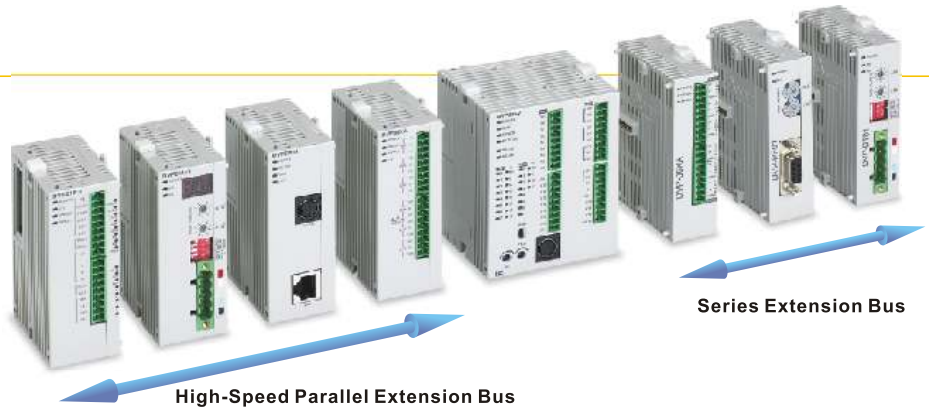
Linear/Arc Interpolation Motion Control

The new handy point-to-point linear motion instruction (PPMR/PPMA) and arc interpolation motion instruction (CIMR/CIMA) allow users to enter only 4 parameters to complete the control.

Built-in 4-Group 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

*Bandwidth refers to the max. counting range of a single counter.



High-Speed Parallel Extension Modules

Communication Modules
- **DeviceNet Slave** DVPDNET01-SL
- **Ethernet** DVPEN01-SL
- **Modem** DVPMDM-SL

Analog Function Extension
- **Analog Input** DVP04AD-SL
- **Analog Output** DVP04DA-SL
- **Mixed Analog I/O** DVP06XA-SL

Temperature Measurement
- **Sensor: PT100** DVP04PT-SL
- **Sensor: J, K Thermocouple** DVP04TC-SL

Motion Control
- **Single-Axis Position Control** DVP01PU-SL

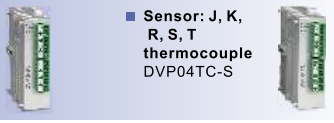
*Contact our sales for the official release date of "high-speed parallel extension modules".

Series Extension Modules

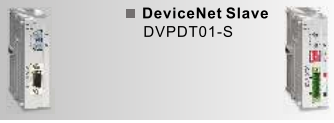
I/O Extension Modules
- **Input Points Extension** DVP08SM11N
- **Output Points Extension** DVP06SN11R, DVP08SN11R/T
- **Mixed I/O Extension** DVP08SP11R/T, DVP16SP11R/T

Analog Function Extension
- **Analog Input** DVP04AD-S, DVP06AD-S
- **Analog Output** DVP04DA-S, DVP02DA-S
- **Mixed Analog I/O** DVP06XA-S

Temperature Measurement
- **Sensor: PT100** DVP04PT-S
- **Sensor: J, K, R, S, T thermocouple** DVP04TC-S



Communication Modules
- **Profibus Slave** DVPPF01-S
- **DeviceNet Slave** DVPDT01-S



Motion Control
- **Single-Axis Position Control** DVP01PU-S

Power Supply Modules
DVPPS01
DVPPS02

Extension

DVP-EH2

Small PLC with the strongest operation performance!

- Maximum 512 points
- 200KHz high-speed pulse output
- New high-speed special extension modules
- Linear/arc interpolation motion control

Function Cards

- **Convert COM2 RS-485 into RS-232/422 interface**
  - DVP-F232
  - DVP-F422
- **Digital Input Points Extension**
  - DVP-F4IP
- **Indot Doint DIP Switch**
  - DVP-F8ID
- **Additional 3rd Communication Port**
  - DVP-F232S
  - DVP-F485S
- **Transistor Output**
  - DVP-F2OT
- **Analog I/O**
  - DVP-F2DA
  - DVP-F2AD
- **Analog Input**
  - DVP-F6VR

Connected With Other Devices

HMI

TP

Servo

VFD

Accessories

- **Data Back-up Card**
  - DVP-256FM (for special purpose)
  - DVP-PCC01 (for general purpose)
- **Digital Display Panel**
  - DVPDU01
- **Handheld Programming Panel**
  - DVPHPP
- **Data Transmission Cable**
  - DVPACAB2A30

Model Name	Specification
DVP16EH00R2	8 8 R
DVP16EH00T2	8 8 T
DVP20EH00R2	12 8 R
DVP20EH00T2	12 8 T 2-axis 200KHz (each axis) pulse output ; supports 1-group linear/arc interpolation motion control
DVP32EH00R2	16 16 R
DVP32EH00T2	16 16 T 2-axis 200KHz (each axis) pulse output ; supports 1-group linear/arc interpolation motion control
DVP40EH00R2	24 16 R
DVP40EH00T2	24 16 T 4-axis 200KHz (each axis) pulse output ; supports 2-group linear/arc interpolation motion control
DVP48EH00R2	24 24 R
DVP48EH00T2	24 24 T
DVP64EH00R2	32 32 R
DVP64EH00T2	32 32 T
DVP80EH00R2	40 40 R
DVP80EH00T2	40 40 T

AC power supply Input (points) Output (points) Relay output Transistor output

I/O Extension Modules

- **Input Points Extension**
  - DVP08HM11N
  - DVP16HM11N
  - DVP32HP00R/T
  - DVP48HP00R/T

- **Output Points Extension**
  - DVP08HN11R/T
  - DVP32HN00R/T

- **Mixed I/O Extension**
  - DVP08HP11R/T
  - DVP16HP11R/T

High-Speed Extension Modules

Analog Function Extension

- **Analog Input**
  - DVP04AD-H2
  - V : 14-Bit
  - I : 13-Bit

- **Analog Output**
  - DVP04DA-H2
  - V : 12-Bit
  - I : 12-Bit

- **Mixed Analog I/O**
  - 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 thermocouple**
  - DVP04TC-H2

Motion Control

- **Single-Axis Position Control**
  - DVP01PU-H2

*Contact our sales for the official release date of "high-speed extension modules".

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

Extension

Most Cost-Effective Solution to Sequential Control!

DVP-ES

256 points
Pulse Output 10KHz

Model Name	Specification
DVP14ES00R2	8 6 R
DVP14ES00T2	8 6 T
DVP24ES00R2	16 8 R
DVP24ES00T2	16 8 T
DVP24ES11R2	DC 16 8 R
DVP32ES00R2	16 16 R
DVP32ES00T2	16 16 T
DVP40ES00R2	24 16 R
DVP40ES00T2	24 16 T
DVP60ES00R2	36 24 R
DVP60ES00T2	36 24 T

AC power supply · Input (points) · Output (points)
DC power supply · Relay output · Transistor output

DVP-EX

256 points
Pulse Output 10KHz
Analog Input/Output

Model Name	Specification
DVP20EX00R2	8DI, 4AI/6DO, 2AO R
DVP20EX00T2	8DI, 4AI/6DO, 2AO T
DVP20EX11R2	DC 8DI, 4AI/6DO, 2AO R

AC power supply · Input (points) · Output (points)
DC power supply · Relay output · Transistor output

I/O Extension Modules

- **Input Points Extension**
  DVP08XM11N
  DVP16XM11N

- **Output Points Extension**
  DVP08XN11R/T
  DVP16XN00R/T
  DVP24XN11R/T
  DVP24XN00R/T

- **Mixed I/O Extension**
  DVP08XP11R/T
  DVP24XP11R/T
  DVP24XP00R
  DVP32XP00R/T

Connected With Other Devices

HMI

TP

Servo

VFD

Accessories

- **Data Back-up Card**
  DVP-PCC01

- **Handheld Programming Panel**
  DVP-HPP

- **Data Transmission Cable**
  DVPACAB2A30(3M)

Compact Appearance; Flexible Extension!

DVP-SS

The best micro-MPU for basic applications

Model	Spec
DVP14SS11R2	DC 8 6 R
DVP14SS11T2	DC 8 6 T

Relay output · Input (points) · Output (points)
DC power supply · Transistor output

DVP-SX

Built-in analog input/output

Model	Spec
DVP10SX11R	DC R 4DI,2AI/2DO,2AO
DVP10SX11T	DC T 4DI,2AI/2DO,2AO

DC power supply · Transistor output
Relay output

DVP-SA

Advanced performance
8K steps program capacity

Model	Spec
DVP12SA11R	DC 8 4 R
DVP12SA11T	DC 8 4 T

Relay output · Input (points) · Output (points)
DC power supply · Transistor output

DVP-SC

Max. 100KHz pulse output
Max. 100KHz pulse counting

Model	Spec
DVP12SC11R	DC 8 4 R
DVP12SC11T	DC 8 4 T

Relay output · Input (points) · Output (points)
DC power supply · Transistor output

I/O Extension Modules

- **Input Points Extension**
  DVP08SM11N

- **Output Points Extension**
  DVP06SN11R
  DVP08SN11R/T

- **Mixed I/O Extension**
  DVP08SP11R/T
  DVP16SP11R/T

Analog Function Extension

- **Analog Input**
  DVP04AD-S
  V : 14-Bit
  I : 13-Bit
  DVP06AD-S
  V : 14-Bit
  I : 13-Bit

- **Analog Output**
  DVP04DA-S
  DVP02DA-S
  V : 12-Bit
  I : 12-Bit

- **Mixed Analog I/O**
  DVP06XA-S
  Input 4CH / Output 2CH
  V : 12-Bit I : 12-Bit
  I : 11-Bit I : 12-Bit

Temperature Measurement

- **Sensor: PT100**
  DVP04PT-S

- **Sensor: J, K, R, S, T Thermocouple**
  DVP04TC-S

Communication Modules

- **Profibus Slave**
  DVPPF01-S

- **DeviceNet Slave**
  DVPDT01-S

Motion Control

- **Single-Axis Position Control**
  DVP01PU-S

Power Supply Module

DVPPS01
DVPPS02

Functions & Electrical Specifications

Functions

Item		ES	EX	SS	SA	SX	SC	EH2	SV	PM
Power Supply	AC	✓	✓					✓		✓
	DC	✓	✓	✓	✓	✓	✓		✓	
I/O Points	256	✓	✓	✓	✓	✓	✓			
	512							✓	✓	✓
Program Capacity	4K steps	✓	✓	✓						
	8K steps				✓	✓	✓			
	16K Steps							✓	✓	
	64K Steps									✓
Output Type	Relay	✓	✓	✓	✓	✓	✓	✓	✓	
	Transistor	✓	✓	✓	✓	✓	✓	✓	✓	
	Differential signal									✓
Special Functions	RTC				✓	✓	✓	✓	✓	
	FLASH memory							✓	✓	✓
	Supports special extension module			✓	✓	✓	✓	✓	✓	✓
	Supports function extension card							✓		✓
	Supports high speed extension module							✓	✓	✓
	Built-in AI/AO		✓			✓				
	2-axes linear/ arc interpolation						✓	✓	✓	✓
	Supports pulse position instruction						✓	✓	✓	✓
	MPG signal input									✓
	Compatible with G-Code/M-Code									✓
Bandwidth of High-Speed Counting (1 phase 1)	20KHz	✓	✓	✓	✓	✓				
	100KHz						✓			
	200KHz							✓	✓	✓
Bandwidth of High-Speed Pulse Output	10KHz	✓	✓	✓						
	50KHz				✓	✓				
	100KHz						✓			
	200KHz							✓	✓	
	500KHz									✓
Communication	MODBUS Series Communication Port — COM1 RS-232	✓	✓	✓	✓	✓	✓	✓	✓	✓
	MODBUS Series Communication Port — COM2 RS-485	✓	✓	✓	✓	✓	✓	✓	✓	✓
	MODBUS Series Communication Port — 3rd communication port							✓		✓
	PLC EASY LINK Master Station				✓	✓	✓	✓	✓	
	Profibus Link			✓	✓	✓	✓		✓	
	DeviceNet Link			✓	✓	✓	✓		✓	
	Modem Link								✓	
	Industrial Ethernet Network								✓	

Electrical Specifications

General Electrical Specifications

	AC	DC
Power Supply Voltage	100 ~ 240VAC (-15% ~ 10%), 50/60Hz ± 5%	24VDC (-15% ~ 20%)
Fuse Capacity	2A/250VAC	2A/250VAC
Spike Voltage Durability	1500VAC (Primary-secondary); 1500VAC (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 250V RS: 26MHz ~ 1GHz, 10V/m	
Earth	The diameter of grounding wire shall not be less than that of the wiring terminal of the power. (When many PLCs are in use at the same time, please make sure every PLC is properly grounded.)	
Operation/Storage	Storage: -40°C ~ 70°C (temperature); 5 ~ 95% (humidity) Operation: 0°C ~ 55°C (temperature); 50 ~ 95% (humidity); pollution degree 2	

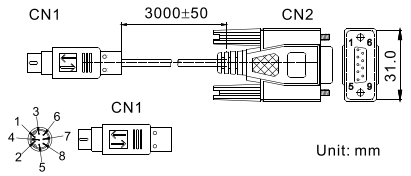
Input Point Specifications

		Single Common Port Input		
		General Speed(10KHz)	Medium Speed(20KHz)	High Speed(100KHz/200KHz)
Input Signal Type		SINK / SOURCE		
Input Signal Voltage		24VDC ± 10% (5mA)		
Response time ES/EX SS/SA/SX SC EH2/SV		0 ~ 15ms adjustable 0 ~ 20ms adjustable 0 ~ 20ms adjustable 0 ~ 60ms adjustable		 4.7μs 0.5μs
Motion Level	OFF->ON	>16.5VDC	>18.5VDC	>16.5VDC
	ON->OFF	<8VDC	<8VDC	<8VDC

Output Point Specifications

	Relay (R)	Transistor (T)	
		General Speed	High Speed
Max. Exchange (Working) Frequency	Load ON/OFF Control	10KHz	50KHz/100KHz/200KHz
Current Specification ES/EX SS SA/SX/ SC EH2/SV	 2A 1.5A 1.5A 1.5A 2A	0.3A/1 point@40°C	<1KHz, 0.3A/1 point@40°C ≧1KHz, 30mA/1 point@40°C
Voltage Specification	250VAC/30VDC	30VDC	
Response Time	10ms	OFF->ON: 20μs ON->OFF: 30μs	EH2/SV 0.5μs SC 1μs SA/SX 2μs

DVPACAB2A30 PIN Definition



PC/HMI COM Port 9 PIN D-SUB female		PLC COM1 Port 8 PIN MINI DIN
Tx 3	⟷	4 Rx
Rx 2	⟷	5 Tx
GND 5	⟷	8 GND
		1,2 5V
1, 4, 6		7, 8

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Ordering Information & Dimension

DVP-PLC Ordering Information

● MPU

DVP □□ ○○ □□□ ⬚

Series ① ② ③ ④ ⑤

1. Total I/O points
2. Model series
   - ES：ES MPU
   - EX：EX MPU
   - SS：SS MPU
   - SA：SA MPU
   - SX：SX MPU
   - SC：SC MPU
   - SV：SV MPU
   - PM：PM MPU
   - EH：EH MPU
3. Input power supply
   - 00：AC
   - 11：DC
4. Output type
   - R：Relay
   - T：Transistor
   - M：Mixed differential signal
5. Version upgrade

● DI/DO Extension Module

DVP □□ ○○ □□□

Series ① ②③ ④ ⑤

1. Total I/O points
2. Applicable model:
   - X： for ES/EX MPU
   - S： for SS/SA/SX/SC/SV MPU
   - H： for EH/PM MPU
3. I/O type
   - M：Input point
   - N：Output point
   - P：Mixed I/O
4. Input power supply
   - 00：AC
   - 11：DC
5. Output type
   - R：Relay
   - T：Transistor

● AI/AO Extension Module

DVP □□ ○○ – □□

Series ① ② ③④

1. Total I/O channels
2. Model
   - AD：analog → digital conversion
   - DA：digital → analog conversion
   - PT：PT100 temperature module
   - TC：Thermocouple temperature module
   - XA: AD and DA mixed module
3. Applicable model:
   - S：for SS/SA/SX/SC/SV MPU
   - H：for EH/PM MPU
   - SL：for SV(left-side extension)
4. Version upgrade

● PI/PO Extension Module

DVP □□ ○○ – H

Series ① ② ③

1. Total I/O channels
2. Extension type:
   - HC : high-speed counter
   - PU : single-axis position module
3. Applicable model:
   - H : for EH/PM MPU
   - S : for SS/SA/SX/SC/SV MPU
   - SL : for SV(left-side extension)

● Peripherals

DVP □□□ ○○

Series ① ②

1. Product name
   - HPP: handheld programming panel
   - DU: digital display panel
2. Type/function
   - 01：Type 01
   - 02：Type 02
   - 03：Type 03

● Function card

DVP – F ○○○ ⬚

Series ① ② ③

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

● Accessory: Cable

DVP A CAB □□□

Series ① ② ③ ④

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

● Accessory: Others

DVP A BT □□

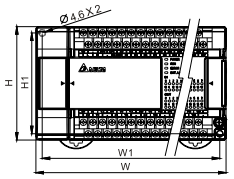
Series ① ② ③

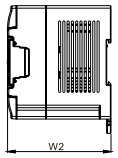
1. Accessory
2. BT: battery
3. Type: 01, 02, ...

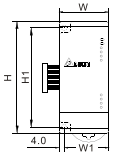
Dimension

EH Series MPU

Model (mm)	H	H1	W	W1	W2
DVP16EH00R2/T2	90	80	113	103	82
DVP20EH00R2/T2	90	80	113	103	82
DVP32EH00R2/T2	90	80	143.5	133.5	82
DVP40EH00R2/T2	90	80	158.5	153.5	82
DVP48EH00R2/T2	90	80	174	164	82
DVP64EH00R2/T2	90	80	212	202	82
DVP80EH00R2/T2	90	80	276	266	82







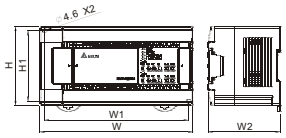
EH Series I/O & Function Extension Modules

Model (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
DVP08HP11R/T	90	80	40	36	82
DVP16HP11R/T	90	80	55	51	82
DVP32HP00R/T	90	80	143.5	133.5	82
DVP48HP00R/T	90	80	174	164	82

Model (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

PM Series MPU

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

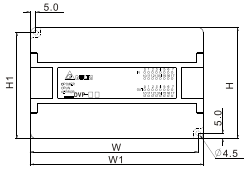


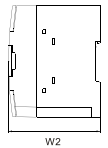
ES/EX Series I/O Extension Modules

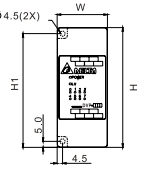
Model (mm)	H	H1	W	W1	W2
DVP08XM11N	100	95	42	37.5	82
DVP16XM11N	100	95	104	99	82
DVP08XN11R/T	100	95	42	37.5	82
DVP16XN11R/T	100	95	155	150	82
DVP24XN11R/T	100	95	155	150	82
DVP24XN00R/T	100	95	155	150	82
DVP08XP11R/T	100	95	42	37.5	82
DVP24XP11R/T	100	95	155	150	82
DVP24XP00R	100	95	155	150	82
DVP32XP00R/T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

ES/EX Series MPU

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

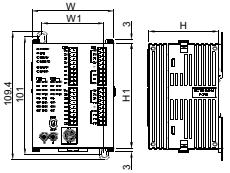






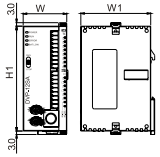
SV Series MPU

Model (mm)	H	H1	W	W1
DVP28SV11R/T	60	90	70	55



SS/SA/SX/SC Series MPU

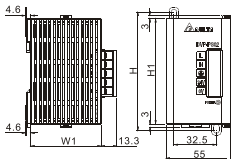
Model (mm)	H	H1	W	W1
DVP14SS11R2/T2	96	90	25.2	60
DVP12SA11R/T	96	90	37.4	60
DVP10SX11R/T	96	90	37.4	60
DVP12SC11T	96	90	37.4	60



SS/SA/SX/SC Series I/O & Function Extension Modules

Model (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	95	25.2	60
DVP16SP11R/T	96	90	25.2	60

Model (mm)	H	H1	W	W1
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
DVPPF01-S	96	90	25.2	60
DVPDT01-S	96	90	25.2	60
DVPPS01	96	90	25.2	60
DVPPS02	96	90	25.2	60



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