Title	Introduction to Delta PLC DVP Series – Slim Type Models
Issued Date	July, 2016
Applicable to	Delta PLC DVP-SV2 Series, DVP-SS2 Series, DVP-SA2 Series, DVP-SX2 Series, DVP-SE Series
Keywords	Slim-type PLC, Programmable Logic Controller

【Introduction】

Programmable Logic Controller (PLC) is the control system designed for industrial environments, which is capable of performing different instructions such as logic computing, sequential control, timing, and counting. It controls different types of machines or production processes through digital or analog input / output. As the brain of automated control, a PLC can be widely used in a variety of industries including packaging, logistics, printing, water treatment, HVAC and traffic monitoring.

Delta PLC DVP Series provide standard, slim type and motion control models. The slim type models features compact design for space-saving installation, and is particularly suitable for installation in control panels. Delta's slim-type PLCs adopt 32-bit CPU for enhanced execution speed and support left-side and right-side modules with a variety of functions, maximum I/O control to 480points and efficient program editing tools. Integrating PLCs with Delta's industrial automation products, Delta is dedicated to deliver total integrated solutions and creating value for our customers.

【High Performance Slim PLC, the DVP-SV2 Series】

DVP-SV2 Series is the high-end model of Delta's slim-type PLCs. It provides larger program capacities and data registers with 32-bit CPU and ASIC dual processors for more demanding and complex applications. DVP-SV2 Series is equipped with many motion control instructions and fast program execution speed to meet the needs of high-speed and high-precision positioning control. It provides complete program protection such as 4-level password protection for source programs, auto backup and second copy function to prevent the loss of programs and data even when the battery runs out or unexpected file damage.



- Program capacity: 30k steps / Data register: 12,000 words
- Execution speed: basic instructions reach 0.24 μs
- Motion Control Functions: 4 axes of 200 kHz high-speed pulse output

Built-in 4 Hardware High-Speed Counters							
Standard		Hardware high-speed counter					
1-phase 1 input		1-phase 1 input		1-phase 2 inputs		2-phase 2 inputs	
Counters	Bandwidth	Counters	Bandwidth	Counters	Bandwidth	Counters	Bandwidth
8	10 kHz	2/2	200 kHz/20 kHz	2/2	200 kHz/20 kHz	2/2	200 kHz/20 kHz

With solid experience and advanced technology, Delta Industrial Automation offers efficient and reliable solutions and service – we are your most trustworthy partner.

COPYRIGHT © 2012 DELTA ELECTRONICS, INC. ALL RIGHTS RESERVED.

【Advanced Slim PLC, the DVP-SA2 Series】

DVP-SA2 Series is the advanced model of Delta's slim PLCs with built-in 1 RS-232 and 2 RS-485 ports (master / slave). It can connect more extension modules, function cards and left-side high speed modules for more applications. No battery is required in the controller, so the program does not disappear even after ling-time power failure.

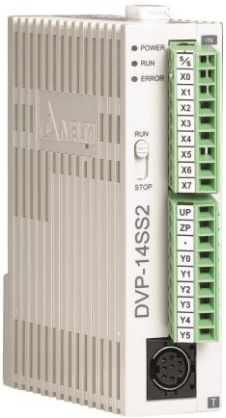


- Program capacity: 16k steps / Data register: 10,000 words
- Execution speed: LD: 0.35μs / MOV: 3.4μs
- Motion Control Functions: Supports 2-axis linear and arc interpolation
  4 points of high-speed pulse output: 100 kHz / 2 points, 10 kHz / 2 points
  8 points of high-speed pulse input: 100 kHz / 2 points, 10 kHz / 6 points,
  1 set of A / B phase 50 kHz

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

【Standard Slim PLC, the DVP-SS2 Series】

DVP-SS2 Series is the economic and compact model of Delta's slim PLCs with maximum extension to 480 I/O points. Built-in with RS-232 and RS-485 ports (master / slave), it can also connect other extension modules and function cards for different needs. DVP-SS2 Series supports standard MODBUS ASCII / RTU protocol and PLC Link function for easy master / slave data handshaking.



- Program capacity: 8k steps / Data register: 5,000 words
- Execution speed: LD: 0.35μs / MOV: 3.4μs
- Motion Control Functions: 4 axes of 10 kHz high-speed pulse output

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

With solid experience and advanced technology, Delta Industrial Automation offers efficient and reliable solutions and service – we are your most trustworthy partner.

COPYRIGHT © 2012 DELTA ELECTRONICS, INC. ALL RIGHTS RESERVED.

【Analog I/O Slim PLC, the DVP-SX2 Series】

DVP-SX2 Series is the slim PLC with outstanding analog functions. It is built-in with mini USB, RS-232 and RS-485 ports (master / slave) and 4 analog inputs, 2 analog outputs. Together with PID auto tuning instructions, DVP-SX2 Series can provide efficient PID control and is particularly suitable for applications which require PID control on flow, pressure and temperature.



- Program capacity: 16k steps / Data register: 10,000 words
- Execution speed: LD: 0.35μs / MOV: 3.4μs
- Motion Control Functions: Supports 2-axis linear and arc interpolation

4 points of high-speed pulse output: 100 kHz / 2 points, 10 kHz / 2 points

8 points of high-speed pulse input: 100 kHz / 2 points, 10 kHz / 6 points

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

【Network Type Advanced Slim PLC, the DVP-SE Series】

DVP-SE Series is the network type slim PLC with most complete functions. It is built-in with mini USB, Ethernet, 2 RS-485 ports and 8 digital inputs and 4 digital outputs. DVP-SE Series supports MODBUS TCP and EtherNet / IP Slave (Adapter), and provides IP Filter function as the firewall to defend and protect PLC programs from malware and network threats.



- Program capacity: 16k steps / Data register: 12,000 words
- Execution speed: LD: 0.64μs / MOV: 2μs
- Motion Control Functions: Supports 2-axis linear and arc interpolation

4 points of high-speed pulse output: 100 kHz / 2 points, 10 kHz / 2 points

8 points of high-speed pulse input: 100 kHz / 2 points, 10 kHz / 6 points

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

With solid experience and advanced technology, Delta Industrial Automation offers efficient and reliable solutions and service – we are your most trustworthy partner.

COPYRIGHT © 2012 DELTA ELECTRONICS, INC. ALL RIGHTS RESERVED.