



DVP10SX11R



DVP20SX2...



DVP10MC11T



PLC starter kit

**SX2/MC series**

**DVP series** PLCs for industrial automation applications have been devoted to delivering more innovative products satisfying customer needs while meeting requirements of a wide variety of applications. Delta PLCs offer a broad range of controllers and modules, all featuring high performance, multiple functions with efficient program editing tools. In addition to user-friendly programming software and faster execution speed, they provide complete industry-focused solutions, motion control solutions, and industrial fieldbus solutions.

| type | supply | inputs |      | outputs |      | width (mm) | output type |
|------|--------|--------|------|---------|------|------------|-------------|
|      |        | (DI)   | (AI) | (DO)    | (AO) |            |             |

**SX2 series - Analog I/O slim PLC**

Compact PLC with outstanding analog functions with highly efficient PID control function. Supports "general" (*right side*) and "high speed" (*left side*) expansion modules.

- 32-bit CPU for high-speed processing
- Program capacity: 16 k steps
- Data register: 10 k words
- Max. execution speed of basic instructions: 0.35 μs
- Built-in analog inputs and outputs (*12-bit resolution*)
- Built-in mini USB, RS-232 and 2x RS-485 com ports (*Master/Slave*)
- Supports standard MODBUS ASCII/RTU protocol and PLC Link function
- No battery required, maintenance free (*RTC operates for 10 days after power off*)

**Motion control functions**

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

|                    |        |   |   |   |   |      |                  |
|--------------------|--------|---|---|---|---|------|------------------|
| <b>DVP10SX11R*</b> | 24 VDC | 4 | 2 | 2 | 2 | 37.4 | relay            |
| <b>DVP20SX211R</b> | 24 VDC | 8 | 4 | 6 | 2 | 70   | relay            |
| <b>DVP20SX211T</b> | 24 VDC | 8 | 4 | 6 | 2 | 70   | transistor (NPN) |
| <b>DVP20SX211S</b> | 24 VDC | 8 | 4 | 6 | 2 | 70   | transistor (PNP) |

\* 2 x 7 segment display

**MC series - Multi-axis motion controller**

**CANopen motion controller**

16 axis motion controller offering highly stability multi-axis motion control solutions through high-speed CANopen communication.

Supports "general" (*right side*) and "high speed" (*left side*) expansion modules.

- Built-in CANopen and encoder interface
- High precision control with interpolation function
- Synchronization time: 4 axes in 2ms / 8 axes in 4ms
- Built-in Ethernet, RS-232 and RS-485 communication ports
- Up to 16 axes synchronous control through CANopen communication
- Supports electronic gear, E-cam (2.048 points), flying shear and rotary cut instructions
- Built-in 12 I/O points (*8 sets of high-speed inputs, 4 sets of high-speed outputs*)
- Built-in motion control instructions of electronic cam, flying shear, rotary cut for easy operation

| inputs |      |
|--------|------|
| (DI)   | (DO) |

|                   |        |   |   |                   |                  |
|-------------------|--------|---|---|-------------------|------------------|
| <b>DVP10MC11T</b> | 24 VDC | 8 | 4 | motion controller | transistor (NPN) |
|-------------------|--------|---|---|-------------------|------------------|

**PLC starter kits**

Each kit comes complete with programming software for the PLC and HMI products, an I/O simulator board, 24 VDC power supply, all interconnecting cables, and a printed starter kit user manual. A Delta Branded USB memory stick is also included with product user manuals, product instruction sheets, and example application programs – all designed to increase commissioning productivity of feature use and interconnected communication.

- Available as Ethernet based kit or economical serial port based kit
- For learning PLC and HMI programming
- UT-14SS2-A (*Serial Kit - DVP-14SS11R + 7" serial HMI*)
- UT-12SE-A1 (*Ethernet Kit - DVP12SE11R + 7" Ethernet HMI*)

|                   |   |       |
|-------------------|---|-------|
| <b>UT-14SS2-A</b> | starter kit for learning programming of PLC /HMI        | relay |
| <b>UT-12SE-A1</b> | as above , but with hardware for Ethernet communication | relay |