

7-Inch Touch Panel HMI with Built-in PLC

TP70P-RM0

- ▶ Adopts the core of the DVP-SS2 Series PLC: program capacity: 2k steps / D device: 5k words
- ▶ 7" TFT-LCD
- ▶ Touch screen
- ▶ Built-in USB port for program upload/download
- ▶ Built-in RS-232 and RS-485 ports
- ▶ Supports MODBUS ASCII/RTU modes
- ▶ Built-in real time clock (RTC)

Dimensions	7" (154 × 85 mm)
Resolution	800 × 480
Display Color	65,535 colors
Flash Memory	64 M bytes
Function Key	Not available
Password	Available
Recipe Function	Not available
RTC	Available
Serial COM Port	RS-232 & RS-485
Editing Software	TPEditor

7-Inch Touch Panel HMI with Built-in PLC

TP70P

- ▶ Adopts the core of the DVP-SS2 Series PLC: program capacity: 4k steps / D device: 5k words
- ▶ Provides 2 sets of 10kHz high-speed pulse input
- ▶ 7" TFT-LCD
- ▶ Touch screen
- ▶ Built-in USB port for program upload/download
- ▶ Built-in RS-485 port*2
- ▶ Supports MODBUS ASCII/RTU modes
- ▶ Built-in real time clock (RTC)
- ▶ Digital and analog I/O terminals available

Dimensions	7" (154 × 85 mm)
Resolution	800 × 480
Display Color	65,535 colors
Flash Memory	64 M bytes
Function Key	Not available
Password	Available
Recipe Function	Not available
RTC	Available
Serial COM Port	2 sets of RS-485
Editing Software	TPEditor

4-Line Text Panel HMI with Built-in PLC

TP04P

- ▶ Adopts the core of the DVP-SS2 Series PLC: program capacity: 8k steps / D device: 5k words
- ▶ Provides 2 sets of 10kHz high-speed pulse input (Excludes TP04P-08TP1R)
- ▶ 4.1" STN-LCD
- ▶ Provides 0~9 numeric keys with user-defined function
- ▶ Built-in USB port for program upload/download
- ▶ Built-in RS-485 port*2
- ▶ Supports MODBUS ASCII/RTU modes
- ▶ User-defined boot screen available
- ▶ Built-in real time clock (RTC)
- ▶ Digital and analog I/O terminals available

Dimensions	4.1" (101.8 × 35.24 mm)
Resolution	192 × 64
Display Color	Monochrome
Flash Memory	1 M bytes
Function Key	17 function keys
Password	Available
Recipe Function	Not available
RTC	Available
Serial COM Port	2 sets for RS-485
Editing Software	TPEditor

		Text Panel HMI					Text/Touch Panel HMI with Built-in PLC			
Model		TP02G-AS1	TP04G-AS2	TP08G-BT2	TP04G-AL-C	TP04G-AL2	TP04G-BL-C	TP04P-Series	TP04P-08TP1R	TP70P-Series
Display Specifications	Screen Type	STN-LCD							TFT-LCD	
	Display Color	Monochrome							65,535	
	Resolution	160 x 32	128 x 64	240 x 128	192 x 64			800 x 480		
	Backlight	Life span of backlight is about 50,000 hours at 25°C							20,000 hours	
	Display Range	72 x 22mm	3" (67 x 32mm)	3.8" (83 x 41mm)	4.1" (101.8 x 35.24mm)			7" (154 x 85mm)		
Flash Memory	256k bytes		1M bytes	256k bytes			1M bytes		64M bytes	
Program Download Port	COM1 (RS-232)						COM1 (USB)		USB	
Serial COM Port	COM1	RS-232	RS-232/422		RS-232	RS-232/422	RS-232	-		-
	COM2	RS-485			-	RS-422/485	RS-422/485	RS-485		TP70 with I/O: RS-485 TP70R-RM0: RS-232
	COM3	-			-	-	-	RS-485		
Extension Interface	The slot for program copy card								-	
Real-time Clock	-	Built-in								
Auxiliary Keys	System Keys	6	7	12	5		7		5	-
	Function Keys	10	5	12	5		10		5	-
Operating Voltage	+24 V _{DC} (-10% ~ +20%)									
Backup Battery	3V lithium battery CR2032 x 1/battery life: 5 years									
Buzzer	85 dB									
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	IEC 61131-2, IEC 68-2-6 (TEST Fc); 5 Hz ≤ f < 8.4 Hz Continuous: 3.5 mm; 8.4 Hz ≤ f ≤ 150 Hz Continuous: 1.0 g									
Shock	IEC 61131-2, 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 ~ 230 MHz, Limits: 40 dB uV/m Frequency: 230 MHz ~ 1 GHz, Limits: 47 dB uV/m									
Radiated Electromagnetic Field	EN61000-4-3, Frequency: 80 ~ 2000 MHz, Limits: 10V/m									
Electrostatic Discharge	EN61000-4-2, Air Discharge: 8 KV, Contact Discharge: 4 KV									
Fast Transient Burst	EN61000-4-4, Power Line: 1 KV, Communication I/O: 500 V									
Dimensions Width (W) × Height (H) × Depth (D)	147 x 97 x 35.5		210 x 122 x 45		163.6 x 108.6 x 37		175.8 x 108.8 x 37		TP04P Series: 175.8 x 108.6 x 59.2 TP04P-20EXL1T: 175.8 x 108.6 x 82.4 TP70P Series: 205.6 x 142.6 x 49 TP70P-RM0: 205.6 x 142.6 x 37 TP70P-211LC1T: 205.6 x 142.6 x 87.7	
Panel Cutout	136 x 85		196 x 108		151 x 96		163 x 96		191 x 128	
Weight	240 g		430 g		268 g		270 g		TP04P Series: 500 g TP04P-20EXL1T: 650 g TP70P Series: 680 g TP70P-RM0: 620 g TP70P-211LC1T: 900 g	
Safety Approvals (Waterproof Class of Front Panel)	IP65/NEMA4 & CE, UL Type 4 indoor				IP65/NEMA4 & CE, UL					
Editing Software	TPEditor V1.87									

Product Outline and Dimensions

Unit: mm

TP02G-AS1	TP04G-AS2	TP04G-AL-C/TP04G-AL2	TP04G-BL-C
<p>Front view: 147 x 97 Top view: 135 x 40.5 Side view: 85</p>	<p>Front view: 147 x 97 Top view: 135 x 40.5 Side view: 85</p>	<p>Front view: 163.6 x 108.6 Top view: 150 x 37 Side view: 95</p>	<p>Front view: 175.8 x 108.6 Top view: 162.2 x 37 Side view: 95</p>
TP04P-Series (Exclude TP04P-08TP1R, TP04P-20EXL1T)	TP08G-BT2	TP70P-Series (Exclude TP70P-RM0, TP70P-211LC1T)	TP70P-RM0
<p>Front view: 175.8 x 108.6 Top view: 162.2 x 59.2 Side view: 95</p>	<p>Front view: 210 x 122 Top view: 196.26 x 37.5 Side view: 108.26</p>	<p>Front view: 205.6 x 142.6 Top view: 189.6 x 49 Side view: 126.6</p>	<p>Front view: 205.6 x 142.6 Top view: 189.6 x 37 Side view: 126.6</p>
TP04P-08TP1R	TP04P-20EXL1T	TP70P-211LC1T	
<p>Front view: 175.8 x 108.6 Top view: 163 x 37 Side view: 96</p>	<p>Front view: 175.8 x 108.6 Top view: 163 x 82.4 Side view: 96</p>	<p>Front view: 205.6 x 142.6 Top view: 191 x 87.7 Side view: 121</p>	