










***TP70P-22XA1R***  
***TP70P-32TP1R***

		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	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 22 mm	3" (67 x 32 mm)	3.8" (83 x 41 mm)	4.1" (101.8 x 35.24 mm)			7" (154 x 85 mm)	
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	-	
	Function Keys	10	5	12	5		10	-	
Operating Voltage	+24V <sub>DC</sub> (-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: 8KV, Contact Discharge: 4KV								
Fast Transient Burst	EN61000-4-4, Power Line: 1KV, Communication I/O: 500V								
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	175.8 x 108.6 x 59.2	TP70 with I/O: 205.6 x 142.6 x 49 TP70R-RM0: 205.6 x 142.6 x 37
Panel Cutout	136 x 85		196 x 108		151 x 96		163 x 96	163 x 96	191 x 128
Weight	240 g		430 g		268 g	270 g	292 g	500 g	TP70 with I/O: 680 g TP70R-RM0: 620 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

**TP02G-AS1**

Front Panel  
  
 147  
 97

Top view  
  
 135  
 30.5  
 3.5  
 40.5

Left Side View  
  
 85

Back Panel  
  
 85

**TP04G-AS2**

Front Panel  
  
 147  
 97

Top view  
  
 135  
 30.5  
 3.5  
 40.5

Left Side View  
  
 85

Back Panel  
  
 85

**TP04G-AL-C/TP04G-AL2**

Front Panel  
  
 163.6  
 108.6

Top view  
  
 150  
 37  
 8

Left Side View  
  
 95

Back Panel  
  
 95

**TP04G-BL-C**

Front Panel  
  
 175.8  
 108.6

Top view  
  
 162.2  
 37  
 8

Left Side View  
  
 95

Back Panel  
  
 95

**TP04P-Series**

Front Panel  
  
 175.8  
 108.6

Top View  
  
 162.2  
 59.2  
 8

Left side view  
  
 95

Back Panel  
  
 95

**TP08G-BT2**

Front Panel  
  
 210  
 122

Top View  
  
 196.26  
 7.5  
 37.5

Left Side View  
  
 108.26

Back Panel  
  
 108.26

**TP70P-16/32TP1R, 21EX1R, 22XA1R**

Front Panel  
  
 205.6  
 142.6

Top View  
  
 189.6  
 7.5  
 49

Right Side View  
  
 126.6

Back Panel  
  
 126.6

**TP70P-RM0**

Front Panel  
  
 205.6  
 142.6

Top View  
  
 189.6  
 7.5  
 37

Right Side View  
  
 126.6

Back Panel  
  
 126.6

## TP Series

Product Name	Description	Model Name	Certificates
TP02	Resolution: 160 x 32, Serial COM ports: RS-232 & RS-485	TP02G-AS1	CE UL US
TP04	Resolution: 128 x 64, Serial COM ports: RS-232 & RS-422/RS-485	TP04G-AS2	
	Resolution: 192 x 64, Serial COM ports: RS-232 & RS-422/RS-485	TP04G-AL2	
	Resolution: 192 x 64, Serial COM ports: RS-232	TP04G-AL-C	CE
	Resolution: 192 x 64, Serial COM ports: RS-232 & RS-422/RS-485, 0 ~ 9 numeric keys available	TP04G-BL-C	
TP04P	Resolution: 192 x 64, Serial COM ports: USB & RS-485	8DI 8DO - - - Relay TP04P-16TP1R	CE UL US
		8DI 16DO - - - Relay TP04P-32TP1R	
		8DI 8DO 4AI 2AO - Relay TP04P-22XA1R	
		8DI 8DO 2AI 1AO 2PT Relay TP04P-21EX1R	
TP70P	Resolution: 800 x 400 Serial COM ports: USB & RS-485	8DI 8DO - - - Relay TP70P-16TP1R	
		16DI 16DO - - - Relay TP70P-32TP1R	
		8DI 8DO 4AI 2AO - Relay TP70P-22XA1R	
		8DI 8DO 2AI 1AO 2PT Relay TP70P-21EX1R	
	Resolution: 800 x 400 Serial COM ports: USB & RS-232/485	- - - - - TP70P-RM0	
TP08	Resolution: 240 x 128, Serial COM ports: RS-232 & RS-422/RS-485, 0 ~ 9 numeric keys available	TP08G-BT2	

## Software

Product Name	Description	OS (Windows based software)
ISPSOft	PLC editing software for DVP and AH500 Series (supports 5 programming languages: LD, FBD, SFC, ST, IL)	Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit)
WPLSOft	Programming software for DVP Series	Windows 98, Me, NT4.0, 2000, XP, Vista, Windows 7 (32-bit/64-bit)
TPEditor	Editing software for TP Series	Windows 98, Me, NT4.0, 2000, XP, Vista, Windows 7 (32-bit/64-bit)
PMSOft	Programming software for DVP-PM series	Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit)
DCISOft	Delta communication integration software	Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit)
DeviceNet Builder	DeviceNet configuration software	Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit)
CANopen Builder	CANopen configuration software	Windows 2000, XP, Vista, Windows 7 (32-bit/64-bit)
NetView Builder	CAN bus message analysis software	Windows 2000, XP, Vista, Windows 7 (32-bit)

## Starter Kit

Product Name	Model Name	Contents
<b>New</b> Delta PLC Starter Kit	UT-14SS2-A	DVP14SS211R (PLC), DOP-B07S410 (HMI) and accessory
	UT-12SE-A1	DVP12SE11R (PLC), DOP-B07E411 (HMI) and accessory

## Industrial Power Supply

Series	Power Supply	Inputs	Outputs	Power	Output Current	Model Name	Certificates
DVP	1-phase	85~264V <sub>AC</sub>	24V <sub>DC</sub>	24W	1 A	DVPPS01	CE UL US
				48W	2A	DVPPS02	
				120W	5A	DVPPS05	

\*Note: For more ordering information, please refer to the catalogue for Delta Industrial Power Supply.