GP-4201T (Model No.: PFXGP4201TAD)

Functional Specification		
Display Type		TFT Color LCD
Display Size		3.5"
Resolution		320 x 240 pixels (QVGA)
Effective Display Area		W70.56 x H52.92 mm [W2.78 x H2.08 in.]
Display Colors		65,536 Colors (No blink)/16,384 Colors (Blink)
Backlight		White LED (User nonreplaceable parts. When replacement is required, contact your local distributor.)
Brightness Control		16 Levels (Adjusted with the touch panel or the software)
Backlight Service Life		50,000 hrs. or more (continuous operation at 25°C [77 °F] before backlight brightness decreases to 50%)
Language Fonts		Japanese: 6,962 (JIS Standards 1 & 2) (including 607 non-kanji characters) ANK: 158 (Korean fonts, Simplified Chinese and Traditional Chinese fonts are downloadable.)
Character Sizes		Standard font: 8 x 8, 8 x 16, 16 x 16 and 32 x 32 pixel fonts, Stroke font: 6 to 127 pixel fonts, Image font: 8 to 72 pixel fonts
Font Sizes *1		Standard font: Width can be expanded up to 8 times. Height can be expanded up to 8 times.
Text	8 x 8 dots	40 char. x 30 rows
	8 x 16 dots	40 char. x 15 rows
	16 x 16 dots	20 char. x 15 rows
	32 x 32 dots	10 char. x 7 rows
Application Memory		FLASH EPROM 16 MB (including a logic program area)
Logic Program Area *2		FLASH EPROM 132 KB (Equivalent to 15,000 steps)
Font Area		FLASH EPROM 8 MB (Rechargeable Lithium battery for backup memory)
Data Backup		SRAM 320 KB (Rechargeable Lithium battery for backup memory)
Variable Area		SRAM 64 KB (Rechargeable Lithium battery for backup memory)
Clock Accuracy *3		±65 sec/month (deviation at room temperature and power is OFF)
Touch Panel Type		Resistive Film (analog)
Touch Panel Resolution		1,024 x 1,024
Touch Panel Service Life		1,000,000 times or more
Interface	Serial (COM1)	RS-232C/422/485 Asynchronous Transmission, Data Length: 7 or 8 bit, Parity: none, Even or Odd, Stop Bit: 1 or 2 bit, Data Transmission Speed: 2,400 bps to 115.2 kbps, 187.5 kbps(MPI), Connector: D-Sub9 (plug)
	Serial (COM2)	None
	Ethernet (LAN)	IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX, Connector: Modular jack (RJ-45) x 1
	USB (Type-A)	Conforms to USB2.0 (TYPE-A) x 1 Power Supply Voltage: DC 5 V ±5 %, Output Current: 500 mA or less, Communication Distance: 5 m or less
	USB (Type mini-B)	Conforms to USB2.0 (mini-B) x 1 Communication Distance: 5 m or less
	SD Card	None

*1: Other font sizes can be set up with the Editor software.
*2: Up to 60,000 steps can be converted in software. However, this reduces application memory capacity (for screen data) by 1 MB
*3: Depending on the operating temperature and age of unit, the clock can deviate from -380 to +90 sec/month.
For systems where this level of deviation is a problem, the user should monitor and make adjustments when required.

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Datasheet

General Specification	
International Safety Standards	
Rated Input Voltage	DC 24 V
Input Voltage Limits	DC 19.2 to 28.8 V
Allowable Voltage Drop	2 ms or less
Power Consumption	9.6 W or less
In-Rush Current	30 A or less
Voltage Endurance	AC 1,000 V, 20 mA for 1 min (between charging and FG terminals)
Insulation Resistance	DC 500 V, 10 MΩ or more (between charging and FG terminals)
Surrounding Air Temperature	0 to 50 °C [32 to 122 °F]
Storage Temperature	-20 to 60 °C [-4 to 140 °F]
Ambient Humidity	10 to 90 % RH (Wet bulb temperature: 39 °C [102.2 °F] or less - no condensation.)
Storage Humidity	
Dust	0.1 mg/m³ (10-7 oz/ft³) or less (non-conductive levels)
Pollution Degree	For use in Pollution Degree 2 environment
Atmosphere	Free of corrosive gases
Air Pressure (altitude range)	800 to 1,114 hPa (2,000 m above sea level or less)
Vibration Resistance	IEC/EN61131-2 compliant, 5 to 9 Hz Single amplitude 3.5 mm [0.14 in.], 9 to 150 Hz Fixed acceleration: 9.8 m/s², X, Y, Z directions for 10 cycles (approx. 100 min)
Concussion Resistance	IEC/EN61131-2 compliant 147 m/s², X, Y, Z directions for 3 times
Noise Immunity	Noise Voltage: 1,000 Vp-p, Pulse Duration: 1 μs, Rise Time: 1 ns (via noise simulator)
Electrostatic Discharge Immunity	Contact Discharge Method: 6 kV (IEC/EN61000-4-2 Level 3)
Grounding	Functional grounding: Grounding resistance of 100Ω, 2mm² (AWG 14) or thicker wire, or your country's applicable standard. (Same for FG and SG terminals)
Structure *1	Equivalent to IP65f NEMA #250 TYPE 4X/13 (on the front panel when properly installed in an enclosure)
Cooling Method	Natural air circulation
Weight Approx.	0.4 kg [0.9 lb] or less (display unit only)
External Dimensions	W132 x H106 x D42 mm [W5.2 x H4.17 x D1.65 in.]
Panel Cut Dimensions *2	W118.5 x H92.5 mm [W4.67 x H3.64 in.], Panel thickness area: 1.6 to 5 mm [0.06 to 0.2 in.]

*1: The front face of the GP unit, installed in a solid panel, has been tested using conditions equivalent to the standards shown in the specification. Even though the GP unit's level of resistance is equivalent to these standards, oils that should have no effect on the GP can possibly harm the unit. This can occur in areas where either vaporized oils are present, or where low viscosity cutting oils are allowed to adhere to the unit for long periods of time. If the GP's front face protection sheet becomes peeled off, these conditions can lead to the ingress of oil into the GP and separate protection measures are suggested. Also, if non-approved oils are present, it may cause deformation or corrosion of the front panel's plastic cover. Therefore, prior to installing the GP unit, be sure to confirm the type of conditions that will be present in the GP's operating environment. If the installation gasket is used for a long period of time, or if the unit and its gasket are removed from the panel, the original level of the protection cannot be guaranteed. To maintain the original protection level, be sure to replace the installation gasket regularly.

*2: Regarding dimensional tolerance, everything +1/-0 mm [+0.04/-0 in.] and R in angle are below R3 [R0.12 in.].

Pro-face's GP4000 Series website **http://www.pro-face.com/product/hmi/gp4000.html**