

GP4000 SERIES

Handheld Model



GP-4311HT

Model: PFXGP4311HTAD*

Model Number Configuration

PFXGP4311HTAD*	
(1)	
(1) Type	
N/A	Without any stop switch and key switch
ER	With emergency stop switch (red), without key switch
ERK	With emergency stop switch (red) and key switch
EYK	With stop switch (yellow) and key switch
EGK	With stop switch (gray) and key switch

Functional Specifications

GP-4311HT		
Display Type	TFT Color LCD	
Display Size	5.7"	
Resolution	640 x 480 Pixels (VGA)	
Dot Pitch	W0.18 x H0.18mm [W0.01 X H0.01in.]	
Effective Display Area	115.2 x 86.4mm (4.54 x 3.4in)	
Display Colors	65,536 Colors (No blink) / 16,384 Colors (Blink)	
Backlight	White LED (Not user replaceable. When replacement is required, contact your local distributor.)	
Brightness Control	16 Levels (Adjusted with touch panel)	
Contrast Control	Not Applicable	
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	
Font Sizes	Standard font: Width can be expanded up to 8 times., Height can be expanded up to 8 times. *1	
8 x 8 Dots	80 Char. x 60 Rows	
8 x 16 Dots	80 Char. x 30 Rows	
16 x 16 Dots	40 Char. x 30 Rows	
32 x 32 Dots	20 Char. x 15 Rows	
Application Memory	Flash EPROM 32MB*2	
Data Backup	SRAM 320KB*2*3	
Clock Accuracy	±65 sec./month (deviation at room temperature and power is OFF) *4	
Touch Panel Type	Resistive Film (Analog)	
Touch Panel Resolution	1,024 x 1,024	
Touch Panel Service Life	1 million times or more	
Interface	Serial (COM1)	Asynchronous Transmission: RS-232C/RS-422/RS-485, Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, odd, or even, Data transmission speed: 2,400 to 115,200bps, 187,500bps (MPI) Maximum Communication Distance*5: When using RS-232C: 15m (49.2ft) When using RS-422 at 115,200bps : 1,200m (3937ft)
	Ethernet (LAN)	IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX Connector: Modular Jack (RJ-45) x 1 Maximum Communication Distance*5: 100m (328.1ft)
	USB (Type-A)	Conforms to USB2.0 (TYPE-A) x 1, Power Supply Voltage: DC 5 V ±5 %, Output Current: 500mA or less, Communication Distance: 5m [16.4ft.] or less
	USB (Type mini-B)	Conforms to USB2.0 (mini-B) x 1, Communication Distance: 5m [16.4ft.] or less
	CF Card	-
	SD Card	SD Card Slot x 1
	Function Switch	12 Switches (Right: 6 Switches, Left: 6 Switches) (DOUT: 2 Open Collector Output [F1, F2], Operation Switch: 1 Open Collector Output [O.P])
	Emergency Switch Output	Push-lock Switch, 3 Contacts (A-contact: 1 Contact, B-contact: 2 Contacts), Rated Voltage: DC 30V, Maximum Rated Current: 1A, (Minimum Allowable Load: DC 5V, 1mA), Applicable Standards*6: IEC/EN60947-5-1, IEC/EN60947-5-5, UL508, CSA C22.2 No.14
	3-Position Enable Switch Output	GP Rear Panel Switch, 2 Contacts (A-contact), Rated Voltage: DC 30V, Maximum Rated Current: 700mA (Minimum Allowable Load: DC 3V, 5mA), Applicable Standards*6: IEC/EN60947-5-8, 60204-1, UL508, CSA C22.2 No.14, ISO12100/EN12100-1,2, ISO11161/prEN11161 ISO10218/EN775, ANSI/RIA R15.06, ANSI B11.19
	Key Switch Output	1c-Contact, Rated Voltage: DC 24V, Maximum Rated Current: 300mA
	Operation Output	Open Collector Output: 1 Point, Rated Voltage: DC 24V, Maximum Rated Current: 300mA
	External Buzzer Output	Open Collector Output 1 Point, Rated Voltage: DC 24V, Maximum Rated Current: 300mA
	DOUT Output	Open Collector Output: 2 Points [F1, F2], Rated Voltage: DC 24V, Maximum Rated Current: 300mA/point

*1 Other font sizes can be set up with the Editor software.

*2 Amount of memory you can use differs depending on your screen editing software. Refer to the manual for your screen editing software.

*3 Rechargeable lithium battery for backup memory.

*4 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.

*5 When using the Conversion Adapter (model number: AGP3000H-ADPCOM-01), the distance includes the cable length between this product and the Conversion Adapter.

*6 Overall system may not meet these standards if implemented outside these parameters. Follow these standards when designing the system.

*7 The conversion adapter is required to use the external output interface (DOUT) and build a system. For details, refer to the installation guide of conversion adapter.

GP4000SERIES

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General Specification

GP-4311HTAD*	
International Safety Standards	UL61010-2-201, CE(EMC, LVD, Machine), KC, EAC, RCM
Rated Input Voltage	24Vdc
Input Voltage Limits	DC 19.2 to 28.8Vdc
Allowable Voltage Drop	10ms or less
Power Consumption	12W or less (When power is not supplied to external devices: 8W or less)
In-Rush Current	35A or less
Voltage Endurance	500Vdc, 20mA for 1 minute (between charging and FG terminals)
Insulation Resistance	500Vdc, 10MΩ or more (between charging and FG terminals)
Surrounding Air Temperature	0 to 40°C (32 to 104°F)
Storage Temperature	-20 to 60°C (-4 to 140°F)
Ambient Humidity	10% to 90% RH (Non Condensing, Wet Bulb Temperature 39°C [102.2°F] or less)
Storage Humidity	10 to 90% RH (Wet Bulb Temperature: 39°C max. - No condensation.)
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 1,114hPa (2,000m [6,561ft] or lower)
Vibration Resistance	IEC/EN 61131-2 compliant 5 to 9Hz Single amplitude 3.5mm (0.14in) 9 to 150Hz Fixed acceleration: 9.8m/s ² X, Y, Z directions for 10 cycles (Approximately 100 Minutes)
Shock Resistance	IEC/EN 61131-2 compliant 147m/s ² , X, Y, Z directions for 3 times
Noise Immunity	Noise Voltage: 1,000Vp-p Pulse Duration: 1ms, Rise Time: 1ns (via noise simulator)
Electrostatic Discharge Immunity	Contact Discharge Method: 6kV (IEC/EN 61000-4-2 Level 3)
Drop Resistance	IEC 61131-2 Compliant 1.0m [3.3ft] Drop - 2 Times
Grounding	Functional Grounding: Grounding resistance of 100Ω, 2mm ² (AWG 14) or thicker wire, or your country's applicable standard (same for FG and SG terminals).
Structure*8	Equivalent to IP65F
Weight Approx.	910g (2.01lb) or less: without a key switch, unit only 960g (2.12lb) or less: with a key switch, unit only

*8 This product has been tested using conditions equivalent to the standards shown in the specification.

NOTE: When using any of the options for this product, make sure to check the specifications for any special conditions or cautions that may apply.

External Dimensions

