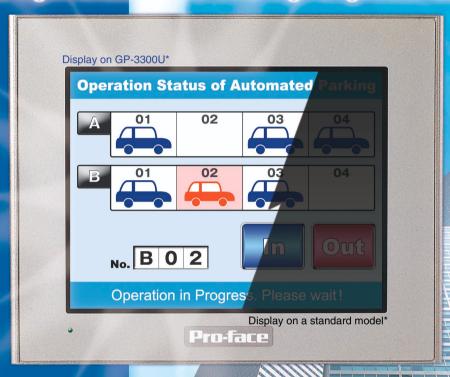


## Clearly Readable Display, Even Where the Sunlight Exists!

Low Light-reflection and Ultra High-brightness Model.





A New Solution from Pro-face for Applications Installed in Well-lighted Locations.



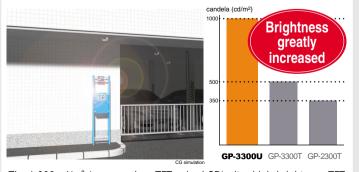
**Designed for Minimizing Light Reflection** 



The anti-reflective design makes it less likely for light to be reflected even in well-lighted locations. This means that sharp and clear screens are displayed even in difficult-to-view locations.

## Reason 2 1,000

1,000 cd/m<sup>2</sup> Ultra High-brightness TFT



The 1,000 cd/m² (measured on TFT color LCD) ultra high-brightness TFT even features a long backlight lifetime of 75,000 hours. This means that you can use HMI in a broad range of environments including well-lighted locations.  $^{\bullet}$  Use as directed in General Specifications on the rear of this leaflet.

(€ , (Under application)

AC1,000V 20 mA for 1 minute (Between charging and FG terminals)

10 to 90% RH (Wet bulb temperature: 39°C max. - no condensation)

10 to 90% RH (Wet bulb temperature: 39°C max. - no condensation)

For use in Pollution Degree 2 environment

5 to 9 Hz Single Amplitude 3.5 mm [0.14 in.]

9 to 150 Hz Fixed Acceleration: 9.8 m/s<sup>2</sup> X, Y, Z Directions for 10 cycles (100 minutes)

Contact Discharge Method: 6 kV (IEC/EN61000-4-2 Level 3) Protective grounding:Grounding resistance of 100  $\Omega$ 

2 mm<sup>2</sup> or thicker wire, or your country's applicable standard.

IP65f (On the front panel when properly installed in an enclosure)

W167.5 mm x H135 mm x D59.5 mm[W6.59 x H5.31 x D2.34 in.]

800 to 1,114 hPa (2,000 meters max.) IEC/EN61131-2 compliant

Rise Time: 1 ns (via noise simulator)

(Same for FG and SG terminals)

1.0 kg [2.2 lb] max. (unit only)

Natural Air Circulation

DC500V 10  $M\,\Omega$  (min.) (Between charging and FG terminals)

EN 55011 Class A, EN 610000 - 6 - 2

DC24V

5 ms max

26 W max.

0 to 50°C \*6

-20 to +60°C

Free of corrosive gases

Noise Voltage: 1,000 Vp-p Pulse Duration: 1 μs

DC19.2 to 28.8V

International Safety

Conforming Standards

Allowable Voltage Drop

Power Consumption

Voltage Endurance

Insulation Resistance

Ambient Operating Temperature

Ambient Humidity

Storage Humidity

Pollution Degree

Air Pressure Vibration Resistance (altitude range)

Vibration Resistance

Electrostatic Discharge Immunity

Noise Immunity

Grounding

Structure \*7

External Dimensions

Weight Approx.

Cooling Method

Atmosphere

Storage Temperature

Standards

Input Voltage

Rated Voltage

Performance Specifications			
Display Type		TFT Color LCD (Ultra high-brightness)	
Display Colors		65,536 colors (No blink)*1 16,384 colors (3-speed blink)	
Resolution		320 x 240 pixels (QVGA)	
Backlight		CCFL (User nonreplaceable. Factory replacement required.)	
Dot Pitch		W0.36 x H0.36 mm [W0.01 x H0.01 in.]	
Effective Display Area		W117.2 x H88.4 mm [W4.16 x H3.48 in.]	
Brightness		1,000 cd/m² (Measured on TFT Color LCD)	
Brightness Control		8 Levels (Adjusted with the touch panel)	
Backlight Service Life		over 75,000 hrs.	
Application Memory		FLASH EPROM 6 MB *2	
Backup Memory		SRAM 320 KB (Lithium battery for backup memory) *3	
Contr	Variable Area	SRAM 64 KB (Uses lithium battery) *3	
Control Memory	Program Area	FLASH EPROM 132 KB	
	Number of Steps	Equivalent to 15,000 steps *4	
Touch Panel Type		Resistive Film (analog)	
Touch Panel Resolution		1,024 x 1,024	
Interfaces	Serial (COM1)	RS-232C/RS-422/RS-485*5, Asynchronous Transmission, Data Length: 7 bit/8 bit, Parity: None, Odd or Even, Stop Bit: 1 bit/2 bit, Data Transmission Speed: 2,400 bps to 115.2 Kbps, Connector: D-sub 9 pin(plug)	
	Serial (COM2)	RS-422/RS-485, Asynchronous Transmission, Data Length: 7 bit/8 bit, Parity: None, Odd or Even, Stop Bit: 1 bit/2 bit, Data Transmission Speed: 2,400 bps to 115.2 Kbps, 187.5 kbps(MPI), Connector: D-sub 9 pin(socket)	
	Ethernet (LAN)	IEEE802.3u, 10BASE-T/100BASE-TX, Connector: Modular Jack (RJ-45) x 1	
	Communication Expansion Unit 1	Communication Expansion Unit x 1	
	USB	Conforms to USB1.1. (TYPE-A conn.) x 1, Power Supply Voltage: DC5V $\pm 5\%,$ Output Current: 500 mA (max.), Communication Distance: 5 m (max.)	
	CF Card	Compact Flash Card Slot (TYPE-II) x 1	

*1 Changing the Colors setting to "65,536 colors" will disable the blinking feature on all screens in your project. If you	*4 The number of steps can be increased to 60,000 in the software. However, this reduces the internal
wish to use the blinking feature, select 16,384 colors.	memory capacity (for screen data) by 1MB.

"5 RS-232C and RS-422/RS-485 are software switchable.

16 "Operating temperature" refers to the temperature inside the mounting enclosure and on the front panel.

17 The performance of the product cannot be guaranteed for every environment.

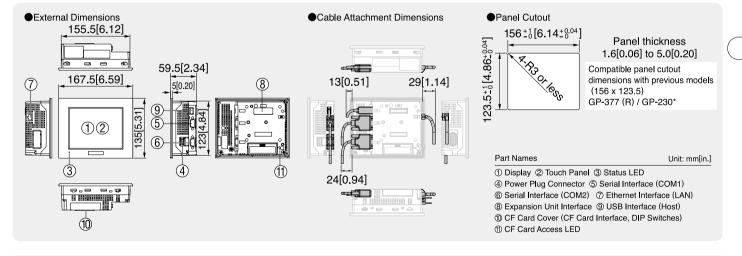
wish to use the blinking feature, select 16,384 colors.

\*2 Capacity available for user application

\*3 A Lithium battery's service life is over 10 years at 40°C or lower, over 4.1 years at 50°C or lower, and over 1.5 years at

60°C or lower. When used for backup, data can be detained for approximately 100 days with a fully charged battery or approximately 6 days with a half-charged battery.

Supporting Screen Editor Software: GP-Pro EX V2.51 or later (For the detail on the upgrade from the previous version, please contact our sales office closest to your office.)



Protective Cover reduces the effectiveness of preventing the reflection of external light. A Screen Protection Sheet is not supported with GP-3300U. For details of other options and system design, refer to the GP-3000 Series Hardware Manual.

© 2009.5 Digital Electronics Corporation. All rights reserved

Pro-face is a registered trademark of Digital Electronics Corporation in Japan, U.S.A., Canada, Europe and other areas and countries.

## **Technical Support Web** Otasuke Pro!

## http://www.pro-face.com/otasuke/

**Global Head Office** [JAPAN] Tel: +81-(0)6-6613-3116 [U.S.A.] Tel: +1-734-429-4971

North/South American Head Office European Head Office

[THE NETHERLANDS] Tel: +31 (0)23 55 44 099

[LOS.A1, 161: +61 (0)3 9550 7395, [AUSTRIA] Tel: +43 7236 3343 620. [BELGIUM] +32 (0)62 34 38 70. [CHINA] Tel: +86-(0)21-6361-515, [CZECH REPUBLIC] Tel: +420 373 721 214. [DENMARK] Tel: +45 02 01 22, [ENGLAND] Tel: +44 (0)2476 440088, [FRANCE] Tel: +32 (0)16 0 21 22 91. [GERMANY] Tel: +49 (0)2476 440088, [FRANCE] Tel: +33 (0)1 60 21 22 91. [GERMANY] Tel: +36 25 99 61, [HUNGARY] Tel: +36 28 40 46 55, [INDIA] Tel: +91-80-4011-8050/8033, [ITALY] Tel: +39 0325 25 99 61, [POLAND] Tel: +48 22 465 66 62, [RUSSIA] Tel: +007 812 336 47 06, [SOUTH KOREA] Tel: +82-(0)2-630-9850, [SPAIN] Tel: +34 (0)93 460 74 5, [SWEDEN] Tel: +46 46 540 90 70, [SWITZERLAND] Tel: +00/33 343 7272, [TAIWAN] Tel: +886-(0)2-2657-1121, [THAILAND] Tel: +66-(0)2-617-5678 www.proface.com