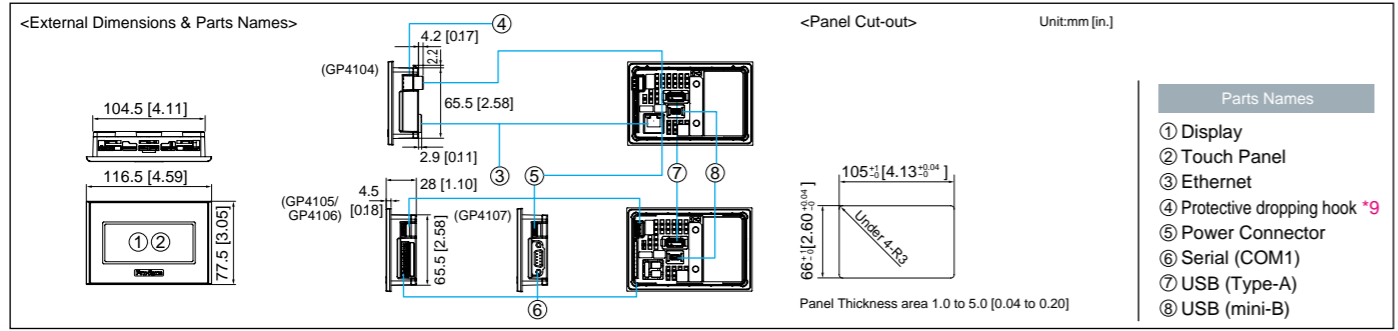## ■ Specification *For details on the specificatons, visit the official Pro-face website or refer to the manuals.

Function Specifications	GP4104G1D GP4104W1D	GP4105G1D GP4105W1D	GP4106G1D GP4106W1D	GP4107G1D GP4107W1D
Display Type	3.4" STN Monochrome LCD			
Display Colors	Monochrome 16 Levels of grayscale			
Resolution	W200 x H80 pixels			
LED Backlight (Not replaceable)	Three color LED *1			
Effective Display Area	W80 x H32 mm			
Language Fonts *2	Japanese, ASCII, Chinese (Simplified), Chinese (Traditional), Korean, Cyrillic, Thai			
Character Sizes	Standard font: 8 x 8, 8 x 16, 16 x 16 and 32 x 32 pixel fonts Stroke font: 6 to 80 pixel fonts Image font: 8 to 72 pixel fonts			
Application memory	FLASH EPROM 2.2 MB *3			
Clock Accuracy	Uses the clock of an external device			
Touch Panel Type	Resistive Film (analog)			

Interface

Ethernet	IEEE802.3u, 10BASE-T/100BASE-TX, Connector Modular jack(RJ-45) x 1			
Serial (COM1)	—	RS-232C, Asynchronous Transmission, Data Length: 7 or 8 bit, Parity: none, Odd or Even, Stop Bit: 1 or 2 bit, Data Transmission Speed: 2,400 bps to 115.2 kbps, Connector: 2-piece terminal block 9 pin	RS-422/485, Asynchronous Transmission, Data Length: 7 or 8 bit, Parity: none, Odd or Even, Stop Bit: 1 or 2 bit, Data Transmission Speed: 2,400 bps to 115.2 kbps, Connector: 2-piece terminal block 9 pin	RS-485 (isolated), Asynchronous Transmission, Data Length: 7 or 8 bit, Parity: none, Odd or Even, Stop Bit: 1 or 2 bit, Data Transmission Speed: 2,400 bps to 115.2 kbps, Connector: D-Sub9 (socket)
USB (Type-A)	Conforms to USB2.0 (Type-A) x 1, Power Supply Voltage: DC 5 V ±5 %, Communication Distance: 5 m or less			
USB (mini-B)	Conforms to USB2.0 (mini-B) x 1, Communication Distance: 5 m or less			

General Specifications	GP4104G1D GP4104W1D	GP4105G1D GP4105W1D	GP4106G1D GP4106W1D	GP4107G1D GP4107W1D
International Safety Standards	UL cUL CE C C KC			
Conforming Standards	UL508, CSA-C22.2 No.142,ANSI/ISA12.12.01*4, CSA-C22.2, No.213*4, EN61000-6-2, EN61000-6-4, EN61131-2, GOST-R, C-Tick mark, KC			
Input Voltage	DC24V			
Power Consumption	2.7W or less *5	3.0W or less *5		3.4W or less *5
Surrounding Air Temperature	0 to 50 C *6			
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	IP65f, NEMA #250 TYPE 4X/13 (on the front panel when properly installed in an enclosure) *7			
External Dimensions	W116.5 x H77.5 x D28 mm [W4.59 x H3.05 x D1.1 in.]			
Weight	0.2 kg [0.4 lb] ot less (display unit only)			
Cooling Method	Natural air circulation			

*1: GP410*G1D three color are Green/Orange/Red. GP410*W1D three color are White/Pink/Red.
*2: Please refer to the GP-Pro EX Reference Manual for details on font types and character codes.
*3: Capacity available for user application.
*4: GP-4104G/W only. Suitable for use in Class I, Division 2, Groups A, B, C, and D Hazardous (classified) locations, or Non-Hazardous Locations.
*5: Does not include power supply for USB devices.
*6: When using in an environment where the temperature becomes or exceeds 40 C for an extended period of time, the screen contrast level may decrease from its original level of brightness.
*7: 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.

<External Dimensions & Parts Names>

Unit:mm [in.]

(GP4104)
104.5 [4.11]
116.5 [4.59]
77.5 [3.05]
①②
4.2 [0.17]
65.5 [2.58]
2.9 [0.11]
(GP4105/ GP4106)
4.5 [0.18]
28 [1.10]
65.5 [2.58]
(GP4107)

<Panel Cut-out>

105⁺¹ [4.13⁺⁰·⁰⁴]
66⁺¹ [2.60⁺⁰·⁰⁴]
Under A-R3
105⁺¹ [4.13⁺⁰·⁰⁴]

Panel Thickness area 1.0 to 5.0 [0.04 to 0.20]

Parts Names
① Display
② Touch Panel
③ Ethernet
④ Protective dropping hook *9
⑤ Power Connector
⑥ Serial (COM1)
⑦ USB (Type-A)
⑧ USB (mini-B)

*9: GP units with Rev.1 or higher have protective dropping hook.

■ Units

Product Name	Model No.	Types of connection	Backlight Colors	Display Type	USB	Input Voltage
GP-4104G NEW	GP4104G1D	10BASE-T/ 100BASE-TX	Green/Orange/Red			
GP-4104W NEW	GP4104W1D		White/Pink/Red			
GP-4105G	GP4105G1D	RS-232C	Green/Orange/Red	3.4" STN Monochrome LCD 16 Grayscales	Type-A x1 mini-B x1	DC24V
GP-4105W	GP4105W1D		White/Pink/Red			
GP-4106G	GP4106G1D	RS-422/485	Green/Orange/Red			
GP-4106W	GP4106W1D		White/Pink/Red			
GP-4107G	GP4107G1D	RS-485 (isolated)	Green/Orange/Red			
GP-4107W	GP4107W1D		White/Pink/Red			

" ** " is changed with the version of software.

■ Accessories

Product Name	Model No.	Description
GP-Pro EX	EXEDV**	Screen editor software
USB Transfer Cable (Type-A/mini-B) (1.8 m)	ZC9USCBMB1	Cable for transferring screen data from a PC (Type-A) to the GP (USB mini-B)
Mitsubishi PLC Q-Series CPU I/F Cable (3 m)	ZC9CBQ31	Connects the GP directly to the CPU programming port on the Mitsubishi Electric PLC Q series
Mitsubishi PLC FX-Series CPU I/F Cable (5 m)	ZC9CBFX51	Connects the GP directly to the CPU programming port on the Mitsubishi Electric PLC FX series
Mitsubishi PLC FX-Series CPU I/F Cable (1 m)	ZC9CBFX11	
Mitsubishi PLC A-Series Cable (5 m)	ZC9CBA51	Connects the GP directly to the CPU programming port on the Mitsubishi Electric PLC A/QnA series
Panasonic Electonic Works PLC FP Series CPU Cable (2m)	ZC9CBFP21	Connects the GP directly to the CPU port on the Panasonic Electric Works PLC FP series
USB Panel-mount Extension Cable (USB mini-B 1m)	ZC9USEXMB1	Extension cable attaching to the USB (mini-B) port on the front side of the operation panel
USB Panel-mount Extension Cable (USB Type-A 1m)	CA5-USBEXT-01	Extension cable attaching to the USB (Type-A) port on the front side of the operation panel
USB-Serial (RS-232C) Conversion Cable (50cm)	CA6-USB232-01	Cable for converting a GP unit's USB interface (Type-A) into a serial interface (RS-232C)
Screen Protection Sheet	ZC9DS31	Disposable, dirt-resistant sheet for the GP unit's screen. (5 sheets/set)
USB Clamp Type-A (1 Port)	ZC9USCL1	USB (Type-A) Cable clamp for 1 port products to prevent disconnection (5 clamps/set)
USB Clamp mini-B (1port)	ZC9USCLMB1	USB (mini-B) Cable clamp for 1 port products to prevent disconnection (5 clamps/set)

■ Maintenance Items *Please purchase when the product is damage or lost.

Product Name	Model No.	Description
Installation Fastener	ZC9AF31	Used to install the GP into a solid panel (2 pieces/set)
Installation Gasket	ZC9WG31	Provides dust and moisture resistance when GP is installed into a solid panel (1 piece)
COM I/F Connector	ZC9CMC1	Connector for Serial I/F (1 piece) *10
DC Power Supply Connector	ZCACNDCS1	Connector for attaching power supply to 3.4-inch GP units. (Set of 5 connectors) *11

*10 GP4105G/W, GP-4106G/W only. *11: For GP-4104G/W only. For the support for GP-4105G/W, GP-4106G/W and GP-4107G/W, contact your Pro-face sales representative.

⚠ WARNING

HAZARD OF OPERATOR INJURY, OR UNINTENDED EQUIPMENT DAMAGE

Before operating any of these products, be sure to read all related manuals thoroughly.

Failure to follow these instructions can result in death or serious injury, unintended equipment damage.

● For printing purposes, the colors in this catalog may differ from those of the actual unit.
● Actual user screens may differ from the screens shown here.
● All product names used in this catalog are the registered trademarks or trademarks of their respective companies.
● All information contained in this catalog is subject to change without notice.

Pro-face®

Graphic Operator Interface

Full Featured Compact
Graphic Operator Interface

Bright & Easy-to-read Display
Easy Connection
Easy Installation

Ethernet models newly added to the GP4100 lineup

GP4100 SERIES

Compact HMI with easy-to-read display.
Compact HMI for easy operation.

Compact graphic operator interface with features selected from all Pro-face HMI products.

3.4 inch STN Monochrome LCD

77.5mm [3.05in.]

116.5mm [4.59in.]   Actual size

- 200 x 80 pixel resolution
- 16 levels of grayscale
- USB I/F x 2 (Type-A/mini-B)

4ch Operation Status
MENU
SET
ALM
INST
1.Flow 2.Remain 3.Temp 4.Humid

Pro-face

NEW

GP-4104G/W	GP-4105G/W	GP-4106G/W	GP-4107G/W
[Ethernet model]	[RS-232C model]	[RS-422/485 model]	[RS-485(Isolated) model]

Compact HMI suitable for your application

Select from two backlight color patterns

Green	Orange	Red
White	Pink	Red

Or

Select from types of connections
- Ethernet **NEW**
or
- RS-232C
or
- RS-422/485
or
- RS-485(isolated)

Select vertical or horizonal installation

Suitable for international use

CE, UL LISTED, UL LISTED

To be certified by GOST-R, C-Tick mark, and KC

Connect directly to a variety of devices
As of May 2011

Maker Name	PLC Driver Name
Mitsubishi Electric Corporation	A Series CPU Direct
	A Series Computer Link
	FX Series CPU Direct
	FX Series Computer Link
	FX Series Ethernet
	Q Series CPU Direct
	Q Series QnU CPU Ethernet
	Q/QnA Serial Communication
	Q/QnA Series Ethernet
	QnA Series CPU Direct
	QUTE Series CPU Direct
OMRON Corporation	C/CV Series HOST Link
	CS/CJ Series EtherNet/IP
	CS/CJ Series Ethernet
	CS/CJ Series HOST Link
YASKAWA Electric Corporation	MEMOBUS SIO
	MP Series SIO (Extension)
	MP/SERVO Ethernet
Hitachi Industrial Equipment Systems Co.,Ltd	H Series Ethernet
	H Series Serial
Panasonic Electric Works Co.,Ltd	FP Series Computer Link SIO
Yokogawa Electric Corporation	Personal Computer Link SIO
	Personal Computer Link Ethernet
	MEMOBUS SIO Master
	MODBUS TCP Master
JTEKT Corporation (Old Name:TOYODA Machine works,LTD.)	TOYOPUC CMP-LINK SIO
	TOYOPUC CMP-LINK Ethernet
Fuji Electric Systems Co.,Ltd.	MICREX-SX Series Ethernet
Siemens AG	SIMATIC S7 3964(R)/RK512
	SIMATIC S7 MPI Direct
	SIMATIC S7 Ethernet
	SIMATIC S5 CPU Direct
	SIMATIC S5 3964(R)
Siemens Building Technologies	SAPHIR SIO

Maker Name	PLC Driver Name
Rockwell Automation, Inc.	DF1
	EtherNet/IP
	DH-485
KEYENCE CORPORATION	KV-700/1000/3000/5000 CPU Direct
	KV-700/1000/3000/5000 Ethernet
	KV Series CPU Direct
	KV-10_80RW/TW CPU Direct
Schneider Electric SA	MODBUS SIO Master
	MODBUS TCP Master
	Uni-Telway
	MODBUS Slave
Sharp Manufacturing Systems Corporation	JW Series Computer Link Ethernet
LS Industrial Systems Co., Ltd.	Master-k Series Cnet
	XGT Series FENet
	XGT Series Cnet
FANUC LTD.	Power Mate Series
Hitachi, Ltd.	S10V Series Ethernet
TOSHIBA MACHINE CO., LTD.	TC Series (TC mini/TC200)
TOSHIBA CORPORATION	Computer Link Ethernet
KOYO ELECTRONICS INDUSTRIES CO., LTD.	KOSTAC/DL Series CCM SIO
	KOSTAC/DL Series MODBUS TCP
FATEK AUTOMATION Corporation	FB Series SIO

Temperature and Process Controllers

Maker Name	Driver Name
Fuji Electric Systems Co., Ltd.	Temperature Controllers MODBUS SIO
Yamatake Corporation	Digital Controller SIO
	MODBUS SIO Master
	MODBUS TCP Master
RKC INSTRUMENT INC.	Temperature Controllers MODBUS SIO
	Temperature Controller
OMRON Corporation	Temperature Controllers CompoWay/F
Yokogawa Electric Corporation	Personal Computer Link SIO
Shinko Technos Co., Ltd.	Indicating Controller SIO

Temperature and Process Controllers

Maker Name	Driver Name
CHINO CORPORATION	Temperature Controllers MODBUS SIO

Inverter/ Servo

Maker Name	Driver Name
Hitachi Industrial Equipment Systems Co.,Ltd	Inverter MODBUS RTU
	Inverter ASCII SIO
Mitsubishi Electric Corporation	FREQROL Inverter
YASKAWA Electric Corporation	INVERTER/SERVO SIO
	MP/SERVO Ethernet
Fuji Electric Systems Co., Ltd.	INVERTER SIO
Sanmei Electric Corporation	Si/CutyAxis Series SIO

Industrial Robot

Maker Name	Driver Name
IAI Corporation	ROBO CYLINDER MODBUS SIO
	X-SEL Controller

Fieldbus/Other Devices

Maker Name	Driver Name
Digital Electronics Corporation	Memory Link *1
	General Ethernet *2
	General SIO *2
Modbus-IDA	General MODBUS RTU SIO Master
	General MODBUS TCP Master
ODVA	EtherNet/IP Explicit Messaging

*1 A driver for communication through a memory area in a main unit.
*2 A program driver that processes send and receive commands using D-script.

More drivers under development
Visit the Otasuke Pro! support website for the newest drivers and more detailed information!

→ http://www.pro-face.com/otasuke/

Easy-to-read display in a compact size

● A wide variety of characters
Small characters are displayed clearly with 200 x 80 pixel resolution allowing for flexible screen editing regardless of character size.

Magnified view
Clear
No distortion of characters

11pt Clear 綺麗 清晰 에쁘다
10pt Clear 綺麗 清晰 에쁘다
9pt Clear 綺麗 清晰 에쁘다
8pt Clear 綺麗 清晰 에쁘다
MSPGothic

M E N U
Many switches can be placed on a small screen.

<Multi-language support>
Provides flexibility in multi-lingual environments by offering a choice of display languages familiar to operators.

Clear ▶ 綺麗 / 清晰 / 에쁘다
English / Japanese / Simplified Chinese / Korean

<Alarm history display>
Messages can also be displayed using image fonts allowing for easy-to-read alarm identification.

Alarm
Alarm history can be displayed in scrolling text, eliminating display area limitations.

Full screen display is also supported.
No.1: Overcurrent of the heater

● Easy-to-see numbers
Numbers are clearly displayed with bitmap and image fonts.

1234 — Bitmap font (Neon)
1234 — Image font
1234 — Standard font (seven-segment)

● Stylish parts
Recognizable and easy-to-operate screens can be created using clear parts.

16-grayscale parts

Plain monochrome parts
More parts downloadable from our support website.
http://www.pro-face.com/otasuke/

● Visual information
A wide variety of graphs are available for screen design, providing visual representation of operational status.

Line graph   Semi-circular graph   Bar graph

● Crisp images
JPEG and BMP images can be displayed clearly with 16 levels of grayscales.

16 gray scales   Display photos and illustrations clearly

Features of large-sized models in small package

NEW
● Easy to connect to control devices without programs
GP4100 Series allows you select suitable communication either Ethernet model or Serial model.

Ethernet or Serial — PLC, Inverter, Temperature controller..., Single board computer
* You can select a suitable GP4100 Series model to connect to your control devices.

● Easy transfer of screen data without a PC (USB Type-A)
Easy screen editing using a USB flash drive without bringing a PC to the site.

Using USB Type-A allows you other benefits.

<Connectable to a Bar-code/2D code reader>
USB connection allows data scanning with easy setup.
*Use a self-powered USB hub when using a USB code reader.

<Connect to devices using USB to SIO conversion>
Support for expanded SIO scripts allows simultaneous connection to a temperature controller and PLC.

<Ladder data can be transferred via USB memory>
Ladder data can be transferred from a display unit to TC Series (PLCs manufactured by Toshiba Machine, Co., Ltd) and MP2000 Series (PLCs manufactured by YASKAWA Electric Corporation).

Copy data in advance from PC to USB flash drive.

NEW
● Easy to add sub-displays on a large-sized machine
GP-4104 allows you to add it as sub-display by the Ethernet multi-link function without changing machine settings.

Ethernet
GP-3000 Series
Ethernet or Serial
Control devices
GP-4104   GP-4104   GP-4104
* The Ethernet Multilink function allows one control device to communicate with one master unit and up to 16 slave units.

● Easy editing of 3rd party PLC ladder programs (USB mini-B)
The Pass-through feature allows you to easily edit PLC ladder programs and change the configuration via a HMI, without switching cables on site.

A USB extension cable can be installed to the front of a cabinet for maintenance without opening the panel.

PC — Ladder Tools — PLC

Easy installation with the common software among all Pro-face products

GP-Pro EX

● Screen Editor GP-Pro EX, common with all Pro-face products

The GP4100 series offers the other useful features. Visit the official Pro-face website for more information. **http://www.proface.com/**