Pro-face®

Modular Type Graphic Operator Interface

GP4000M SERIES

65,536-color, clear TFT LCD display for enhanced operation

3.5" QVGA

5.7" QVGA

GP-4201TM

GP-4301TM

Easy to identify

Easy to install

Easy to connect

Operation panel with realistic graphics
comes as a HMI standard

Simple and precise operation made possible by the 65,536-colors TFT display.
Easy to identify, easy to install and easy to connect via a variety of interfaces.

65K-color Screen with 3D Parts

Low Power Consumption
5.7" 6.8 W or less
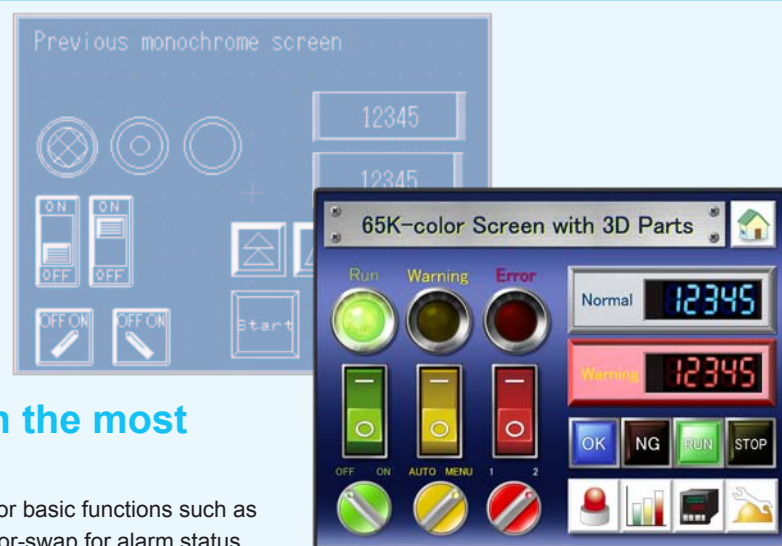3.5" 6.5 W or less

Light Weight
5.7" 0.62 kg (1.36 lb.) or less
3.5" 0.36 kg (0.79 lb.) or less
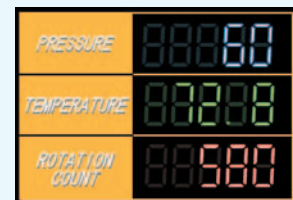*main unit only

---

Easy to identify

Powerful TFT LCD expression in 65,536 colors

Realize expressive operation screens using 65,536-color and 3D Real Parts.

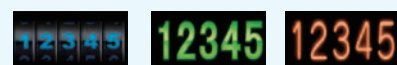Previous monochrome screen

65K-color Screen with 3D Parts

Enhanced graphics for even the most basic functions

Utilize 65,536 colors for basic functions such as 7-digit display and color-swap for alarm status messages.
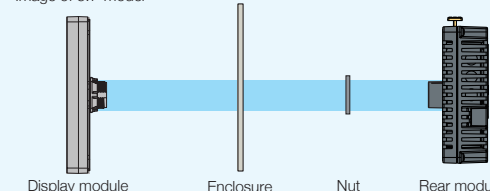
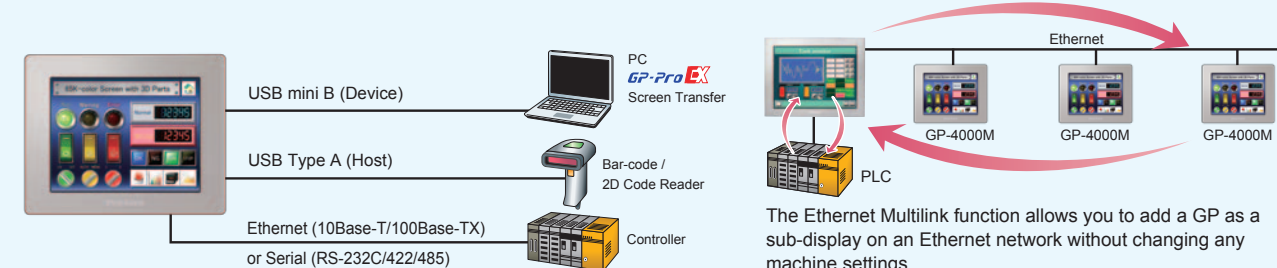A variety of graphical fonts provides easy-to-read numbers.

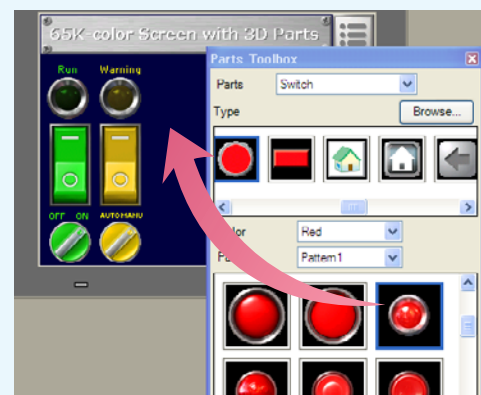Use the project converter to distribute screens assets with GP-Pro EX.

Easy to create

GP-Pro EX Ver. 2.71 or later

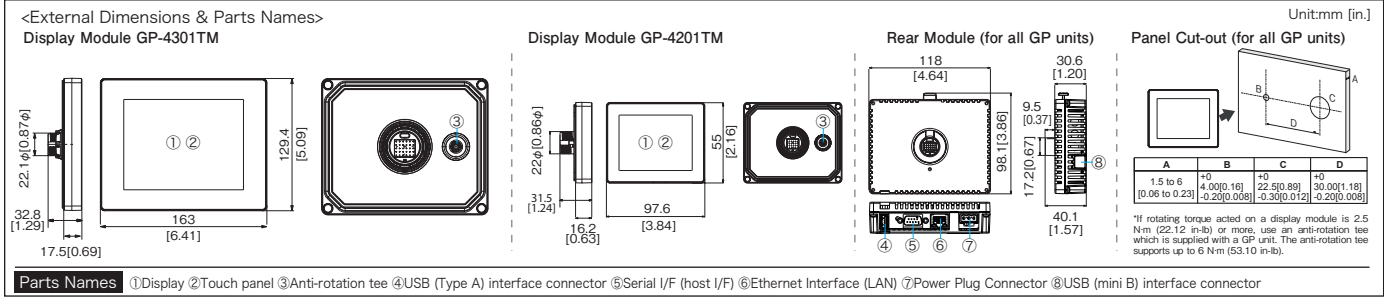Drag-and-drop allows you to easily create operation screens on GP-Pro EX, a screen creation software.

In addition, it's easy to create attractive screens by downloading backgrounds and illustrations online.

http://www.proface.com/otasuke/

Easy to install

Just make a φ22 mm [0.87 in.] circular hole.

* Image of 5.7"model

Display module   Enclosure   Nut   Rear module

Easy to connect

Provides a variety of onboard interfaces for hassle-free connection to various peripheral and control devices.

USB mini B (Device) — PC GP-Pro EX Screen Transfer

USB Type A (Host) — Bar-code / 2D Code Reader

Ethernet (10Base-T/100Base-TX) or Serial (RS-232C/422/485) — Controller

Ethernet — GP-4000M GP-4000M GP-4000M

PLC

The Ethernet Multilink function allows you to add a GP as a sub-display on an Ethernet network without changing any machine settings.

Connect to various control devices via Ethernet or a serial port.

Connect directly to a variety of devices

* On the GP4000M Series, either a serial interface or an Ethernet interface can be active for communication to control devices.

As of July 2011

Maker Name	Driver Name	SIO or Ethernet	Ethernet multi-link	Maker Name	Driver Name	SIO or Ethernet	Ethernet multi-link	Maker Name	Driver Name	SIO or Ethernet	Ethernet multi-link
Digital Electronics Corporation	General Ethernet	●	●	Mitsubishi Electric Corporation	A Series Computer Link	●	●	RKC INSTRUMENT INC.	Temp. Controller MODBUS SIO	●	●
	General SIO	●	●		A Series Ethernet	●	●		Temp. Controller RKC SIO	●	●
	Memory Link	●	●		A Series Computer Link	●	●	Rockwell Automation, Inc.	DF1	●	●
Fatek Automation Corporation	FB Series SIO	●	●		FX Series CPU Direct	●	●		DH-485	●	
Fuji Electric Co.,Ltd.	MICREX-F Series SIO	●	●		FX Series CPU Direct	●	●		EtherNet/IP	●	●
	MICREX-SX Series Ethernet	●	●		FX Series Ethernet	●	●	Schneider Electric SA	MODBUS SIO Master	●	●
	MICREX-SX Series SIO	●	●		Q Series CPU Direct	●	●		MODBUS Slave	●	●
JTEKT Corporation	TOYOPUC CMP-LINK Ethernet		●		Q Series QnU CPU Ethernet	●	●		MODBUS TCP Master	●	●
	TOYOPUC CMP-LINK SIO	●			Q/QnA Serial Communication	●	●		Uni-Telway	●	
KEYENCE Corporation	KV700/1000/3000/5000 CPU Direct	●			Q/QnA Series Ethernet	●	●	Siemens AG	SIMATIC S7 Ethernet	●	●
	KV-10 80RW/TW CPU Direct	●			QnA Series CPU Direct	●	●		SIMATIC S7 MPI Direct	●	
KOYO ELECTRONICS INDUSTRIES CO., LTD.	KOSTAC/DL Series CCM SIO	●			QUTE Series CPU Direct	●	●	Siemens Building Technologies	SAPHIR SIO	●	
LS Industrial Systems Co., Ltd.	KOSTAC/DL Series MODBUS TCP	●		Modbus-IDA	General MODBUS RTU SIO Master	●		TOSHIBA MACHINE CO., LTD.	TC Series (TCmini/TC200)	●	
	MASTER-K Series Cnet	●			General MODBUS TCP Master	●	●	YASKAWA Electric Corporation	MP/SARVO Ethernet	●	●
	XGT Series Cnet	●		OMRON Corporation	C/CV Series HOST Link	●			MP Series SIO(Extension)	●	
	XGT Series Fenet	●			CS/CJ Series Ethernet	●	●	Yokogawa Electric Corporation	Personal Computer Link SIO	●	
Mitsubishi Electric Corporation	A Series CPU Direct	●			CS/CJ Series HOST Link	●					
				Panasonic Electric Works SUNX Co., Ltd.	FP Series Computer Link SIO	●					

More drivers under development Visit the Otasuke Pro! support website for the newest drivers and more detailed information!→ http://www.pro-face.com/otasuke/

Functional Specifications		GP-4301TM	GP-4201TM
Display Type		5.7" TFT Color LCD	3.5" TFT Color LCD
Display Colors		65,536 colors	
Resolution		320 x 240 pixels (QVGA)	
LED Backlight		White LED	
Effective Display Area		W115.2 x H86.4 mm(W4.53×H3.40 in.)	W70.56 x H52.92 mm(W2.78×H2.08 in.)
Language Fonts *1		Japanese, English, 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 127 pixel fonts, Image font: 8 to 72 pixel fonts	
Application memory *2		FLASH EPROM 8 MB	
Clock Accuracy		Uses the clock of an external device	
Touch Panel Type		Resistive Film (analog)	
Interface	Ethernet (LAN)	IEEE802.3i/ IEEE802.3u, 10BASE-T/100BASE-TX Connector：Modular jack (RJ-45) x 1	
	Serial (COM)	RS232C / RS422 / RS485 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 to187,500 bps Connector: 2-piece terminal block 9 pin	
	USB (Type A)	Conforms to USB2.0 (Type A) x 1, Power Supply Voltage: DC 5 V 5 %, Communication Distance: 3 m (9.84 ft) or less	
	USB (Type mini B)	Conforms to USB2.0 (mini B) x 1, Communication Distance: 5 m (16.40 ft) or less	

General Specifications	GP-4301TM	GP-4201TM
International Safety Standards	ⓊⓁ LISTED c ⓊⓁ LISTED CE ℙℂ ℝ	
Conforming Standards	UL508, UL 1604 *3orANSI/ISA 12.12.01*3, CSA-C22.2 No.142, CSA-C22.2 No.213 *3, Functional Specifications, 2004/108/EC EMC Directive,GOST-R,KC	
Input Voltage	DC24V	
Power Consumption	6.8 W or less	6.5 W or less
Surrounding Air Temperature	0 to 50 °C (32 to 122 °F)	
Grounding	Functional grounding: Grounding resistance of 100Ω, 2mm2 (AWG 14) or thicker wire, or your country's applicable standard.	
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 (100 min)	
Structure	NEMA#250 Type 4x (indoor, installed in an enclosure) Display Module: IP 65f (IEC60529) Rear Module: IP 20 (IEC 60529)	
Weight	0.62 kg (1.36 lb.) or less (main unit only)	0.36 kg (0.79 lb.) or less (main unit only)
Cooling Method	Natural air circulation	

*3 Suitable for use in hazardous locations in accordance with ClassⅠ,Division 2 Groups A, B, C and D standards.

*1 Please refer to the GP-Pro EX Reference Manual for details on font types and character codes.
*2 Capacity available for user application. The capacity depends on how many fonts you load from Editor software.

<External Dimensions & Parts Names>

Unit:mm [in.]

Display Module GP-4301TM   Display Module GP-4201TM   Rear Module (for all GP units)   Panel Cut-out (for all GP units)

	A	B	C	D
	1.5 to 6 [0.06 to 0.23]	+0 4.00[0.16] -0.20[0.008]	+0 22.55[0.89] -0.30[0.012]	+0 30.00[1.18] -0.20[0.008]

*If rotating torque acted on a display module is 2.5 N·m (22.12 in-lb) or more, use an anti-rotation tee which is supplied with a GP unit. The anti-rotation tee supports up to 6 N·m (53.10 in-lb).

Parts Names ①Display ②Touch panel ③Anti-rotation tee ④USB (Type A) interface connector ⑤Serial I/F (host I/F) ⑥Ethernet Interface (LAN) ⑦Power Plug Connector ⑧USB (mini B) interface connector

■Units

Product Name	Model No.	Description
GP-4301TM	PFXGM4301TAD	5.7", QVGA (320 x 240 dots), 65,536 colors, RS-232C/422/485, USB (Host x1, Device x1), Ethernet, DC24V
GP-4201TM	PFXGM4201TAD	3.5", QVGA (320 x 240 dots), 65,536 colors, RS-232C/422/485, USB (Host x1, Device x1), Ethernet, DC24V

■Option Items   * We offer various cables for connections to control devices via serial interfaces. For details, please refer to the manual.   " ** " is changed with the version of software.

Product Name		Model No.	Description
GP-Pro EX		EXEDV**	Screen editor software Ver.2.71 or later
Interface USB	USB Front Cable (1m)	CA5-USBEXT-01	Extension cable attaching USB interface to front panel.
	USB-Serial (RS-232C) Conversion Cable (0.5m)	CA6-USB232-01	Cable to convert the USB interface of a GP unit into a serial (RS-232C) interface.
	USB Transfer Cable (USB Type A/mini B)(1.8 m)	ZC9USCBMB1	Cable for transferring screen data from a PC (USB Type A) to the GP unit (USB mini B).
	USB Panel-mount Extension Cable (USB mini B) (1 m)	ZC9USEXMB1	Extension cable attaching to the USB (mini B) interface on the front side of the operation panel.
GP unit Description Screen Protection Sheet	For GP-4201TM	CA6-DFS4-01	Disposable, dirt-resistant sheet for the GP unit's screen. (5 sheets/set) (Hard type)
	For GP-4301TM	PFXZCBDS61	
Accessories Kit		PFXZGMAK1	Anti-rotation Tee*1, USB cable clamp to prevent disconnection (USB Type A*1, Mini B, for 1 port), 2mm-hight spacer to adjust installation panel thickness (1pc/each)

*1 Please purchase when the product is damage or lost.

■Maintenance Items

Product Name	Model No.	Description
Display Installation Nut	PFXZGMNT1	Nut to install the display module (10 pcs/set)
Socket Wrench	PFXZGMSW1	Socket wrench to tighten and loosen the display installation nut (1 pc/set)
DC Power Supply Connector	PFXZGMCNDC1	Connector to connect DC power supply cables (5 pcs/set)