



# **Update History**

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2025/05/20	1st	-	Newly created



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# Safety Information

## **Important Information**

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

## **A** DANGER

**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.

## **A** CAUTION

**CAUTION** indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

## WARNING

**WARNING** indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

## **NOTICE**

**NOTICE** is used to address practices not related to physical injury.

#### **Please Note**

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation and has received safety training to recognize and avoid the hazards involved.

## **Document Scope**

This guidebook introduces the procedures to replace a unit from "GP4000 Series 7" models" to "GP6000 Series Standard 7" models". The recommended substitute models are as follows.

N	Model in use			nmended substitutes
GP4000 Series	PFXGP4401TAD		GP6000 Series	PFXGP6400TAD
7" models	PFXGP4401TADF0C*1		Standard 7" models	To be developed as per request

<sup>\*1:</sup> This is a coated model of PFXGP4401TAD. As for GP6000 Series, you can request the coated model as Lite Customization. For the details, please contact Customer Service.

## **Validity Note**

This document is valid for GP6000 Series Standard Model.

The characteristics of the products described in this document are intended to match the characteristics that are available on <a href="www.pro-face.com">www.pro-face.com</a>. As part of our corporate strategy for constant improvement, we may revise the content over time to enhance clarity and accuracy. If you see a difference between the characteristics in this document and the characteristics on <a href="www.pro-face.com">www.pro-face.com</a>, consider <a href="www.pro-face

## **Registered Trademarks**

Product names used in this manual may be the registered trademarks owned by the respective proprietors.



#### **Related Documents**

You can download the manuals related to this product, such as the software manual, from our website.

https://www.proface.com/en/download/search

# Information on Non-Inclusive or Insensitive Terminology

As a responsible, inclusive company, Schneider Electric is constantly updating its communications and products that contain non-inclusive or insensitive terminology. However, despite these efforts, our content may still contain terms that are deemed inappropriate by some customers.

## **Product Related Information**

This product has been designed, developed and manufactured for use in industrial or factory automation systems.

- The product is not appropriate for use with aircraft control devices, medical life-support equipment, central trunk data transmission (communication) devices, or nuclear power control devices, due to inherent requirements for extremely high levels of safety and reliability.
- When using the product with transportation vehicles (trains, cars, and ships), disaster and crime prevention devices, safety equipment, or medical devices unrelated to life-support systems, use redundant and/or failsafe system designs to ensure reliability and safety.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## **AADANGER**

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Remove all power from the device before removing any covers or elements of the system, and prior to installing or removing any accessories, hardware, or cables.
- Unplug the power cable from both this product and the power supply prior to installing or removing the product.
- Always use a properly rated voltage sensing device to confirm power is off where and when indicated.
- Replace and secure all covers or elements of the system before applying power to this product.
- Use only the specified voltage when operating this product. The DC model is designed to use 12 to 24 Vdc, and the AC model is designed to use 100 to 240 Vac. Always check whether your device is DC or AC powered before applying power.
- When using this product in Class I, Division 2, Groups A, B, C, and D
  hazardous locations, install this product in an enclosure that prevents the
  operator from touching the back of this product without the use of tools.

Failure to follow these instructions will result in death or serious injury.



Please design a safety circuit external to this product so that the entire system operates safely even if the external power supply or this product fails or malfunctions.

- Interlocks and other circuits designed to interrupt or prevent equipment operation (such as emergency stops, protective circuits, and opposing action circuits) and circuits that prevent machine damage, such as positioning mechanisms, should be constructed external to the product.
- The product stops operation when it detects an abnormality such as a
  watchdog timer error. If an error occurs in the input/output control area, which
  cannot be monitored, it may lead to unexpected input/output behavior.
   Therefore, it is important to configure an external fail-safe circuit or
  mechanism.
- Problems with the relay or transistor in the output unit may cause the output to remain either in the ON or OFF state. Install an external monitoring circuit for output signals that may cause a serious accident.

Design the circuit so that power is supplied to the external device or load control power supply connected to this product before it starts.

Critical alarm indicators and system functions require independent and redundant protection hardware and/or mechanical interlocks.

Do not create any switches on the touch panel that may cause personal injury, property damage, or compromise the safety of the equipment. Design the system so that controls for important operations are managed by devices other than this product, or by independent hardware switches.

When you cycle power, wait at least 10 seconds after it has been turned off. If this product is restarted too quickly, it may not operate correctly.

In the event the screen cannot be properly read, for example, if the backlight is not functioning, it may be difficult or impossible to identify a function. Functions that may present a hazard if not immediately executed, such as a fuel shut-off, must be provided independently of this product.

## **AWARNING**

#### LOSS OF CONTROL

- The designer of any control scheme must consider the potential failure modes of control paths and, for certain critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop and overtravel stop, power outage and restart.
- Separate or redundant control paths must be provided for critical control functions.
- System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link.
- Observe all accident prevention regulations and local safety guidelines.
- Each implementation of this product must be individually and thoroughly tested for proper operation before being placed into service.
- The machine control system design must take into account the possibility of the backlight no longer functioning and the operator being unable to control the machine, or making errors in the control of the machine.

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

For additional information, refer to NEMA ICS 1.1 (latest edition), "Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control" and to NEMA ICS 7.1 (latest edition), "Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems" or their equivalent governing your particular location.

## **AWARNING**

#### UNINTENDED EQUIPMENT OPERATION

- The application of this product requires expertise in the design and programming of control systems. Only persons with such expertise should be allowed to program, install, alter, and apply this product.
- Do not use this product as the only means of control for critical system functions such as motor start/stop or power control.
- Do not use this equipment as the only notification device for critical alarms, such as device overheating or overcurrent.
- Use only the software provided with this product. If you use other software, please confirm the operation and safety before use.
- Follow all applicable safety standard, local regulations and directives.

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

The following characteristics are specific to the LCD panel and are considered normal behavior:

- LCD screen may show unevenness in the brightness of certain images or may appear different when seen from outside the specified viewing angle.
   Extended shadows, or crosstalk may also appear on the sides of screen images.
- LCD screen pixels may contain black and white colored spots and color display may seem to have changed.
- When experiencing vibrations within a certain frequency range and vibration acceleration is above what is acceptable, the LCD screen may partially turn white. Once the vibration condition ends, the whitening of the screen is resolved.
- When the same image is displayed on the screen for a long period, an afterimage may appear when the image is changed.
- The panel brightness may decrease when used for a long time in an environment continuously filled with inert gas. To prevent deterioration of panel brightness, regularly ventilate the panel. For more information, please contact customer support.

https://www.pro-face.com/trans/en/manual/1015.html



## **AWARNING**

#### SERIOUS EYE AND SKIN INJURY

The liquid in the LCD panel contains an irritant:

- · Avoid direct skin contact with the liquid.
- · Wear gloves when you handle a broken or leaking unit.
- Do not use sharp objects or tools in the vicinity of the LCD panel.
- Handle the LCD panel carefully to prevent puncture, bursting, or cracking of the panel material.
- If the panel is damaged and any liquid comes in contact with your skin, immediately rinse the area with running water for at least 15 minutes. If the liquid gets in your eyes, immediately rinse your eyes with running water for at least 15 minutes and consult a doctor.

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

## **NOTICE**

#### REDUCTION OF SERVICE LIFE OF PANEL

Change the screen image periodically and try not to display the same image for a long period of time.

Failure to follow these instructions can result in equipment damage.



# Security Enhancement

## **Cybersecurity Guideline**

Use this product inside a secure industrial automation and control system. Total protection of components (equipment/devices), systems, organizations, and

networks from cyber attack threats requires multi-layered cyber risk mitigation measures, early detection of incidents, and appropriate response and recovery

plans when incidents occur. For more information about cybersecurity, refer to the Pro-face HMI/IPC Cybersecurity Guide.

https://www.proface.com/en/download/manual/cybersecurity\_guide

## **▲WARNING**

## POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY

- Change default passwords at first use to help prevent unauthorized access to device settings, controls and information.
- Disable unused ports/services and default accounts, where possible, to minimize pathways for malicious attacks.
- Place networked devices behind multiple layers of cyber defenses (such as firewalls, network segmentation, and network intrusion detection and protection).
- Apply the latest updates and hotfixes to your Operating System and software.
- Use cybersecurity best practices (for example: least privilege, separation of duties) to help prevent unauthorized exposure, loss, modification of data and logs, interruption of services, or unintended operation.

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

## **Security Seal**

This product has a security seal attached, which helps detect unauthorized repairs or modifications to the product. Once the security seal is removed, the product cannot be used again as it would increase the security risk.

## **▲WARNING**

## POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY

- Do not remove the security seal on the product.
- Do not use products with removed security seals.

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



## Federal Communication Commission Radio Frequency Interference Statement – For USA

#### **FCC Radio Interference Information**

This product has been tested and found to comply with the Federal Communications Commission (FCC) limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial, industrial or business environment. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause or be subject to interference with radio communications. To minimize the possibility of electromagnetic interference in your application, observe the following two rules:

- Install and operate this product in such a manner that it does not radiate sufficient electromagnetic energy to cause interference in nearby devices.
- Install and test this product to ensure that the electromagnetic energy generated by nearby devices does not interfere with the operation of this product.

## **AWARNING**

## ELECTROMAGNETIC / RADIO INTERFERENCE, UNINTENDED EQUIPMENT OPERATION

Check for electromagnetic and radio interference. If interference is detected, take the following actions.

- Increase the distance between this product and the interfering equipment.
- · Reorient this product and the interfering equipment.
- Reroute power and communication lines to this product and the interfering equipment.
- Connect this product and the interfering equipment to different power supplies.
- Always use shielded cables when connecting this product to a peripheral device or another computer.

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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this product.



## Hazardous Location Installation - For USA and Canada

#### General

This product is suitable for use in Class I, Division 2, Groups A, B, C, and D hazardous locations or in non-hazardous locations. Before installing or using this product, confirm that the Hazardous Location certification appears on the product labeling.

NOTE: Some products are not yet rated as suitable for use in hazardous locations. Always use your product in conformance with the product labeling and this manual.

## **AADANGER**

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Remove all power from the device before removing any covers or elements of the system, and prior to installing or removing any accessories, hardware, or cables.
- Unplug the power cable from both this product and the power supply prior to installing or removing the product.
- Always use a properly rated voltage sensing device to confirm power is off where and when indicated.
- Replace and secure all covers or elements of the system before applying power to this product.
- Use only the specified voltage when operating this product. The DC model is designed to use 24 Vdc, and the AC model is designed to use 100 to 240 Vac. Always check whether your device is DC or AC powered before applying power.

Failure to follow these instructions will result in death or serious injury.

## **▲WARNING**

#### **EXPLOSION HAZARD**

- Do not use this product in hazardous environments or locations other than Class I, Division 2, Groups A, B, C, and D.
- Substitution of any components may impair suitability for Class I, Division 2.
- Always confirm the UL 121201 or CSA C22.2 No.213 hazardous location rating of your device before installing or using it in a hazardous location.
- To apply or remove the supply power from this product installed in a Class I, Division 2 hazardous location, you must either: A) Use a switch located outside the hazardous environment, or B) Use a switch certified for Class I, Division 1 operation inside the hazardous area.
- Do not connect or disconnect equipment unless power has been switched off or the area is known to be non-hazardous. This applies to all connections including power, ground, serial, parallel, and network connections.
- Do not install any components, equipment, or accessories manufactured by us or by OEM unless these have also been qualified as suitable for use in Class I, Division 2, Groups A, B, C, and D locations.
- Always use shielded/grounded cables in hazardous locations.
- · Use only non-incendive USB devices.
- Do not attempt to install, operate, modify, maintain, service, or otherwise alter this product except as permitted in this manual. Unpermitted actions may impair the suitability of this product for Class I, Division 2 operation.

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

Make sure that this product is properly rated for the location. If the intended location does not presently have a Class, Division and Group rating, then users should consult the appropriate authorities having jurisdiction in order to determine the correct rating for that hazardous location.

## Hazardous Location Installation - For USA and Canada

## **Operation and Maintenance**

The systems have been designed for compliance with relevant spark ignition tests.

## **AWARNING**

#### **EXPLOSION HAZARD**

In addition to the other instructions in this manual, observe the following rules when installing this product in a hazardous location:

- Wire the equipment in accordance with the National Electrical Code article 501.10 (B) for Class I, Division 2 hazardous locations.
- Install this product in an enclosure suitable for the specific application.

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



# Table of Contents

1	Summary				
2	Hardware Section				
	2-1	Specification Comparison			
	2-2	Standards Compatibility			
	2-3	Interface Compatibility			
	2-4	Installation Method Compatibility			
	2-5	Option Compatibility			
	2-6	Other Important Notes on Hardware			
3	Soft	ware Section			
	3-1	Replacement Procedure			
	3-2	Software Compatibility			

**Other Important Notes on Software** 

# 1. Summary

The replacement from GP4000 series 7" models (PFXGP4401TAD\*\*\*) to GP6000 Series Standard 7" models (PFXGP6400TAD\*) generally keeps compatibility, but the following is the main point to note.

- The supported interfaces are the same, but the locations are different, and the wiring will change significantly. Refer to the 2-3. Interface Compatibility in this document.
- Before replacing the unit, refer to GP-Pro-EX Device/PLC Connection Manual to check the cable connection just in case.
- GP6000 Series Standard models is supported by GP-Pro EX V5.00.000 or later. For information about the software part, refer to GP-Pro EX Reference Manual.
- GP6000 Series Standard models is equipped with System Settings separate from offline mode. In the System Settings, you can configure the hardware settings. For information about the System Settings, refer to <a href="GP6000 Series Hardware">GP6000 Series Hardware</a> <a href="Manual">Manual</a>.





# 1. Summary

GP6000 Series Model Number partly differs depending on a specification. Before placing an order, please make sure of the model number.

Digit	Digit position											
1	2	3	4	5	6	7	8	9	10	11	12	13 and later
			(mod	del)	(series)	(display size)	(type)		(LCD)	(touch panel)	(power supply)	(customizing and others)
PFX	PFX		GP		6	3: 5"	00: Sta	andard	T: TFT	A: Analog	A: AC	(none): Normal
						4: 7"				M: Matrix	D: DC	C: Coating
						5: 10"						FZ: Others
						6: 12"						



# 2. Hardware Section



# 2-1. GP4000 vs GP6000 Specification Comparison - 1. Basic Information -

32		GP4000 7" models (PFXGP4401TAD***)	GP6000 7" models (PFXGP6400TAD***)	Points to note when replacing
Display type		TFT co	lor LCD	
Display s	size	7.	5"	
Resolution	on	640 x 480 p	pixels (VGA)	
Display c	olors	65,536 colors (no blink), 16,384 colors (blink)	16 million colors (no blink)	No blink function
Backlight	t	White LED (not u	user replaceable)	
Backlight	service life	50,000 hou (continuous operation at 25°C before b		
Touch pa	nel type	Resistive film (and		
Touch pa	nel service life	1 million tin		
Mamani	Application memory	FLASH EPROM 32MB	eMMC Flash 64MB	Refer to FAQ for the available
Memory	Backup memory	SRAM 320KB	NVRAM 320KB	capacity of each memory
Battery (d backup)	clock data	Replaceable batte		
Rated inp	out voltage	DC	24V	
Power Co	onsumption	12W or less	9.6W or less	
Environm	nental Spec	Operating Temp: 0-55°C,	, Storage Temp: -20-60°C	

## 2-1. GP4000 vs GP6000 Specification Comparison - 2. Interface -

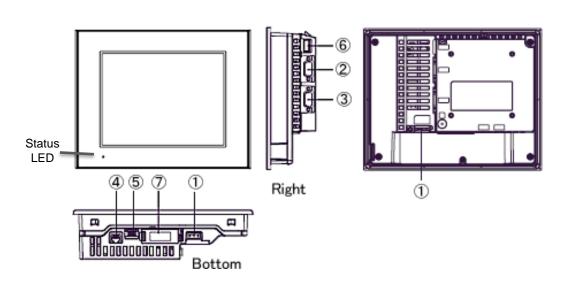
		GP4000 7" models (PFXGP4401TAD***)	GP6000 7" models (PFXGP6400TAD***)	Points to note when replacing
Serial COM1		RS-232C (D-S		
I/F	COM2	RS-422/485 (D	-Sub 9pin Plug)	
Ethernet	I/F	10BASE-T/100BASE-TX (RJ-45) x 1	10BASE-T/100BASE-TX (RJ-45) x 2	
CF Card	I/F		-	
SD Card I/F		SD Card slot x 1 (maximum 32GB SD/SDHC Card)	SD Card slot x 1 (SD/SDHC/SDXC, UHS-I supported)	
	Туре А	USB 2.0 x 1 - USB transfer cable (PFXZC3CBUSA1)	USB 2.0 x1	No screen data transfer via Type A
USB I/F	Type mini-B	USB 2.0 x 1 - USB transfer cable (ZC9USCBMB1)	-	USB I/F changed from USB
	Type micro-B	-	USB 2.0 x1 - USB transfer cable (PFXZUSCBMB2) or commercial USB micro-B transfer cable	Type mini-B to Type micro-B
Auxiliary	I/O I/F		-	
Sound O	utput I/F		-	
Expansio	on Unit I/F		-	
Structure		IP65F NEMA #250 TYPE 4X/13 (on the front panel when properly installed in an enclosure)	IP65F, Type 1, Type 4X (indoor use only) and Type 13 (on the front panel when properly installed in an enclosure)	The description in the hardware manual is different, but the spec is the same.
External	dimensions	W218 x H17		
Panel cut	t dimensions	W204.5 x I	H159.5 mm	

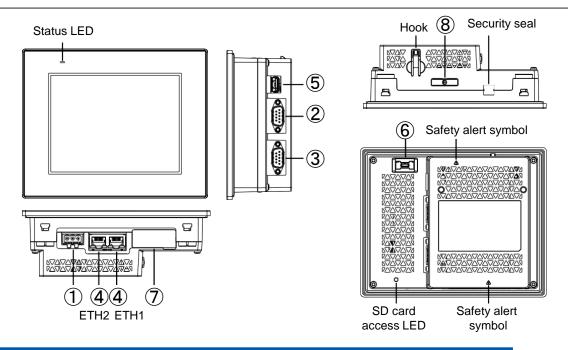
Hardware Manual: GP6000 Series Hardware Manual

# 2-2. Standards Compatibility

Certification	GP4000 7" models (PFXGP4401TAD***)	GP6000 7" models (PFXGP6400TAD***)
CE (EN61000-6-4, EN61000-6-2, EN61131-2)	✓	✓
UKCA	✓	✓
UL/cUL	✓ (UL508) (CSA C22.2 No.142)	✓ (UL61010-2-201) (CSA C22.2 No.61010-2-201)
UL/cUL Class 1, Div. 2	✓ (ANSI/ISA12.12.01) (CSA C22.2 No213)	✓ (UL121201) (CSA C22.2 No213)
ATEX (Zones 2/22, equipment category 3 Gas Dust)	✓	Planned (in Q3/2025)
IECEx (Zones 2/22, equipment category 3 Gas Dust)	✓	Planned (in Q3/2025)
UKEX	✓	Planned (in Q3/2025)
KCs	✓	Planned (in Q4/2025)
NEPSI → CCC-Ex	✓	Planned (in Q4/2025)
RCM (C-Tick)	✓	✓
EAC (GOST-R)	Managed by Country	Managed by Country
RoHS for EU	✓	✓
RoHS for China	✓	✓
REACH	✓	✓
CCC *apply for CCC exemption	-	-
KC	✓	✓
Marine (DNV, ABS, LR, BV, NK, RINA, CCS)	DNV, ABS, LR, BV, NK, RINA, CCS	DNV, NK, EU RO MR (Q2/2026)
WEEE	✓	✓

# 2-3. Interface Compatibility



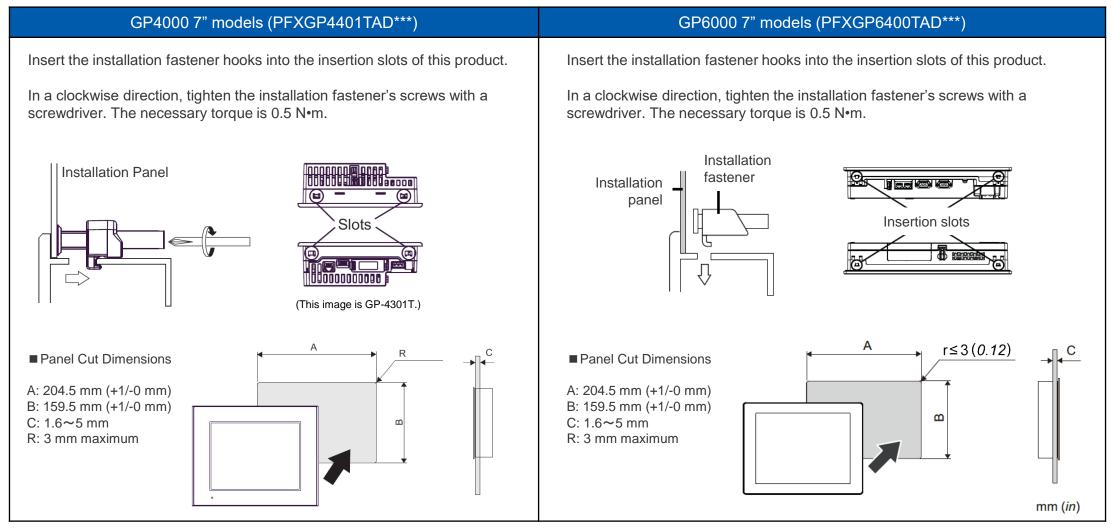


	GP4000 7" models (PFXGP4401TAD***)	GP6000 7" models (PFXGP6400TAD***)
1	Power connector	Power connector
2	Serial Interface (COM1)	Serial Interface (COM1)
3	Serial Interface (COM2)	Serial Interface (COM2)
4	Ethernet Interface	Ethernet Interface (ETH1) Ethernet Interface (ETH2)
(5)	USB (Type A) Interface	USB (Type A) Interface
6	USB (mini-B) Interface	USB (micro-B) Interface
7	SD Card Interface Cover / Replacement Battery Insertion Cover	7: SD Card Slot 8: Battery Slot

NOTE: Please be careful when replacing, as the wiring will change significantly. Please check GP6000 Series Hardware Manual for details such as interface specifications and pin assignments.

# 2-4. Installation Method Compatibility

Panel Cut Dimensions of GP6000 Series 7" models are the same as GP4000 Series 7" models.



NOTE: The installation fasteners for GP4000 Series (P/N: PFXZCBAF1) cannot be used for GP6000 Series. Please use the fasteners for GP6000 Series (P/N: PFXZC3AT1). Please check GP6000 Series Hardware Manual for installation requirements and procedure.

# 2-5. Option compatibility – Serial Interface

Product Name	Product Number	er (Pro-face CR)	Description	Competibility
Product Name	GP4000 Series	GP6000 Series	- Description	Compatibility
RS-232C Cable (5m)	PFXZC3CBR251 (C	CA3-CBL232/5M-01)	Cable for RS-232C connection between various hosts and this product	~
RS-422 Cable (5m)	PEX / C3CBR 451 (CA3-CBI 422/5M-01)		Cable for RS-422 connection between various hosts and this product (Socket Type)	~
RS-422 Cable (5m)	PFXZC3CBR452	(CA3-CBL422-01)	Cable for RS-422 connection between various hosts and this product (Plug Type)	~
Mitsubishi PLC A-Series Connection Cable (5m)	PFXZC3CBA51 (CA3-CBLA-01)		Cable for directly connecting an A Series CPU	~
Mitsubishi PLC Q-Series Connection Cable (5m)	PFXZC3CBQ51 (CA3-CBLQ-01)		Cable for directly connecting a Q Series CPU	~
Mitsubishi PLC Q-Series Link Cable (5m)	PFXZC3CBQL51 (CA3-CBLLNKMQ-01)		Cable for directly connecting a Q Series Link Unit	~
Mitsubishi PLC FX-Series Connection Cable (1m)	PFXZC3CBFX11 (0	CA3-CBLFX/1M-01)	Cable for directly connecting an FX Series CPU	~
Mitsubishi PLC FX-Series Connection Cable (5m)	PFXZC3CBFX51 (0	CA3-CBLFX/5M-01)	Cable for directly connecting an FX Series CPU	~
Omron PLC SYSMAC Link Cable (5m)	PFXZC3CBSYS51	(CA3-CBLSYS-01)	Cable for directly connecting a SYSMAC Link Unit	<b>✓</b>
Siemens TTY Converter Cable (5m)	PFXZC6CBTTY51 (0	CA6-CBLTTY/5M-01)	Cable for connecting a PLC S5 series to this product	<b>✓</b>
MPI Cable (3.5m)	PFXZGPCBMPPE1 (ST03-A2B-MPI21-PFE) PFXZGPCBMPPE5 (CA3-MPI-PG1-PFE) PFXZGPCBMPPE6 (CA3-MPI-PGN-PFE)	PFXZGPCBMPPE1 (ST03-A2B-MPI21-PFE)	Connects a host controller to this product for MPI communication.	~

# 2-5. Option compatibility – Serial Interface

Product Name	Product Number	er (Pro-face CR)	Description	Competibility	
Product Name	GP4000 Series	GP6000 Series	Description	Compatibility	
Multi Link Cabla (5m)	PFXZC3CBML1 (	CA3-CBLMLT-01)	Connects a host controller to this product for multi-link (n:1) communication *End of sale	~	
Multi-Link Cable (5m)	PFXZCE	BCBML1	Connects a host controller to this product for multi-link (n:1) communication *End of sale	~	
RS-232C 9-pin/25-pin Conversion Cable (20cm)	PFXZC3CBCVR21 (	CA3-CBLCBT232-01)	Cable for converting a D-Sub 9-pin plug to a D-Sub 25-pin socket	V	
RS-422C 9-pin/25-pin Conversion Cable (20cm)	PFXZCB(	CBCVR41	Cable for converting a D-Sub 9-pin plug to a D-Sub 25-pin socket	•	
2 Port Adapter Cable (5m)	PFXZC3CBMD1 (CA3-MDCB11)	-	Connects Mitsubishi PLC to this product using 2 port adapter II (RS-422) *End of sale	No	
2 Port Adapter Cable (SIII)	PFXZCBCBMD1	-	Connects Mitsubishi PLC directly to the GP unit (D-sub 9 pin plug) using 2 port adapter II (RS-422).	No	
Mitsubishi PLC A, QnA, FX Series 2 Port Adapter II	PFXZGPADMD1 (GP070-MD11)	-	Allows simultaneous use of this product and a Mitsubishi PLC A, QnA, FX Series peripheral device. *End of sale	No	
COM Port Conversion Adapter	PFXZC3ADCM1 (	CA3-ADPCOM-01)	Connects optional RS-422 communication items to serial interface.	V	
RS-422 Terminal Block Conversion Adapter	PFXZCE	BADTM1	Connects output from a serial interface (D-sub 9 pin plug) directly to an RS-422 terminal block.	~	
Terminal Block Conversion Adapter	PFXZC3ADR41 (	CA3-ADPTRM-01)	Connects output from a serial interface (D-sub 9 pin socket) directly to an RS-422 terminal block.	V	
RS-232C Isolation Unit	PFXZC3ADISR21	(CA3-ISO232-01)	Connects a host controller to this product and provides isolation (RS-232C and RS-422 are switchable).	~	

# 2-5. Option compatibility – USB Interface

Draduct Name	Product Number	er (Pro-face CR)	Description	Compatibility	
Product Name	GP4000 Series	GP6000 Series	Description Description		
USB Transfer Cable (2m)	PFXZC3CBUSA1 (CA3-USBCB-01)	-	Cable for transferring screen data between a PC (USB Type A) and this product (USB Type A)	N/A of USB A to A screen transfer	
USB Transfer Cable	-	PFXZUSCBMB2	Cable for transferring screen data from a PC (USB Type A) to this product (USB micro-B)	NEW	
USB Cable (5m)	PFXZC0CBU	S1 (FP-US00)	Connects a USB printer (Type B)	<b>✓</b> *1	
USB Front Cable (1m)	PFXZC5CBUBEX1	(CA5-USBEXT-01)	Extension cable that attaches USB interface (Type A) to front panel	<b>✓</b>	
USB (micro-B) Front Cable	-	PFXZCIEXMB2	Extension cable that attaches USB interface (micro-B) to front panel	NEW	
USB Clamp Type A (1 port)	-	PFXZCBCLUSA1	Clamp to prevent disconnection of USB cable (USB/A, 1 port, 5 clamps/set)	NEW	
USB-Serial (RS-232C) Conversion Cable (0.5m)	PFXZC6CBCVUSR2	21 (CA6-USB232-01)	Cable for converting a USB interface into a serial interface (RS-232C)	<b>✓</b> *1	
USB/RS-422/485 Conversion Adapter	PFXZCBC	BCVUSR41	Adapter for connecting this product (USB Type A) to an external device (RS-422/RS-485)	<b>✓</b> *1	
USB Transfer Cable (USB Type A/mini-B) (1.8 m)	PFXZC9USCBMB1 (ZC9USCBMB1)	-	Cable for transferring screen data from a PC (USB Type A) to the GP unit (USB mini-B).	No	
USB Panel-mount Extension Cable (USB mini-B) (1 m)	PFXZC9USEXMB1 (ZC9USEXMB1)	-	Extension cable that attaches to the USB (mini-B) interface on the front side of the operation panel.	No	
USB Clamp mini-B (1 port)	PFXZC9USCLMB	31 (ZC9USCLMB1)	Clamp to prevent disconnection of USB cable (USB/mini-B, 1 port, 5 clamps/set)	<b>✓</b>	

<sup>\*1</sup> Plan to support by future version of GP-Pro EX.

# 2-5. Option compatibility – USB Interface, Other

Product Name	Product Number	er (Pro-face CR)	Description	Compatibility	
Froduct Name	GP4000	GP6000	Description		
EZ Tower Light tube mounting fixing plate			USB Connection Type Monolithic EZ Tower Light tube mounting with fixing plate 3 tiers, Ø60, lighting and flashing with a buzzer	<b>✓</b> *1	
EZ Tower Light with base mounting	PFXZCETWW1		USB Connection Type Monolithic EZ Tower with base mounting 3 tiers, $\emptyset$ 60, lighting and flashing with a buzzer	<b>✓</b> *1	
EZ Illuminated Switch	PFXZCCEUSG1		A unit of 5 illuminated switches with multiple color LED easily connected with this product unit via USB	<b>✓</b> *1	
EZ Numpad	PFXZCCEUKB1 -		Numpad connected to this product via USB *End of sale	No	
EZ Fingerprint Recognition Unit	PFXZCCEUSS1 -		Fingerprint recognition unit connected to this product via USB *End of sale	No	
EZ LAN Adapter	PFXZCGEUUE1	-	An adapter to expand an Ethernet port to HMI	No	

## Other options

Product Name		Product Number (Pro-face CR)		Description	Compatibility	
		GP4000	GP6000	- Description	Compatibility	
SD Memory Card		PFXZCBSD4GC41		SD memory card (4 GB), SDHC	<b>v</b>	
		-	PFXZCSD16GC101	SD memory card (16 GB), SDHC	NEW	
		-	PFXZCSD32GC101	SD memory card (32 GB), SDHC	NEW	
		-	PFXYP6SD64GCX	SD memory card (64 GB), SDHC	NEW	
Screen Protection Sheet		PFXZC	BDS71	Disposable, dirt-resistant sheet for the GP unit screen (5 sheets/set)	<b>v</b>	
UV Protection Sheet		PFXZCFUV71		Sheet to protect the display from ultraviolet light (1 sheet)	<b>v</b>	
Environment Cover	ment Cover         For 7 inch         PFXZCBOP71         -           For 7 inch         -         PFXZCBOP72		PFXZCBOP71	-	Disposable, environmental resistant cover for 7-inch screen (1 sheet)	Use the option for
		Disposable, environmental resistant cover for 7-inch screen (1 sheet)	GP6000			

<sup>\*1</sup> Plan to support by future version of GP-Pro EX.

# 2-5. Option compatibility - Maintenance options

Product Name		Product Number (Pro-face CR)		Description	Compatibility	
		GP4000	GP6000	- Description	Companishing	
Installation Fastener		PFXZCBAF1	-	Installation factories (4 pieces/got)	Use the option for GP6000	
		-	PFXZC3AT1	Installation fastener (4 pieces/set)		
Installation Gasket	For 7-inch	PFXZCBWG71	-	Provides dust and moisture resistance when this product is installed into a	Use the option	
IIIStaliation Gasket	For 7-inch	-	PFXZCBWG72	solid panel (1 piece)	for GP6000	
USB Clamp Type A (1 port)		PFXZCB	CLUSA1	Clamp to prevent disconnection of USB cable (USB/A, 1 port, 5 clamps/set)	~	
DC Power Supply Connector		PFXZCBCNDC1		Connector to connect DC power supply cables (5 pieces/set)	<b>✓</b>	
Battery for Memory Backup		PFXZCBBT1	-	Primary battery for memory and time data backup (1 piece)	Use the option	
		-	PFXZGEBT1	Filmary battery for memory and time data backup (1 piece)	for GP6000	



# 2-5. Other Important Notes on Hardware

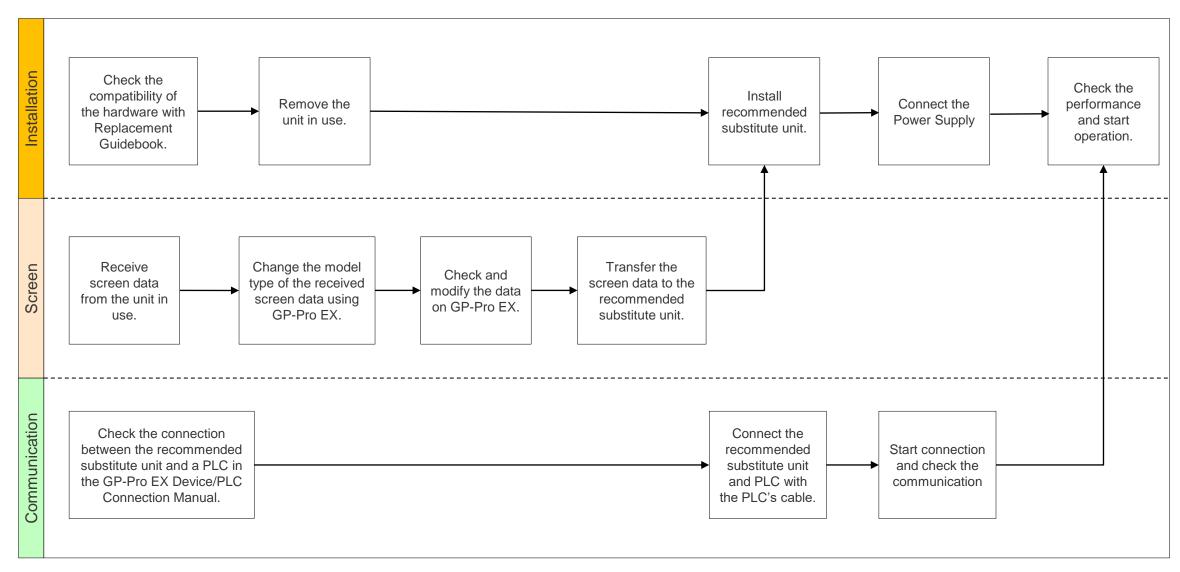
- Do not expose the hardware to direct sunlight. Recommend to use the option item "UV Protection Sheet" to protect the
  display from ultraviolet light.
- This product is not designed for outdoor use. UL certification obtained is for indoor use only.
- Do not turn on the hardware if condensation has occurred inside the device.
- The panel brightness may decrease when used for a long time in an environment continuously filled with inert gas. Please ventilate the control panel periodically.



# 3. Software Section



# 3-1. Replacement Procedure – Workflow



# 3-1. Replacement Procedure - Preparation

Requirements for receiving screen data from the unit in use *1	PC in which GP-Pro EX Transfer Tool is installed. *2
	Transfer Cable (the followings can be used)  USB transfer cable: PFXZC3CBUSA1 (Type A – Type A)  USB transfer cable: ZC9USCBMB1 (Type A – Type mini-B) or commercial type  *It's also possible to send/receive a screen via SD card, USB storage device or Ethernet.
Requirements for converting screen data of the unit in use and transferring the converted data to Recommended	PC with GP-Pro EX installed GP6000 Series supported version: V5.00.000 or later
substitute unit	Transfer Cable (the followings can be used) USB transfer cable: PFXZUSCBMB2 (Type A – Type micro-B) or commercial type *It's also possible to send/receive a screen via Ethernet.

<sup>\*1:</sup> This step is required if screen data is saved only in the HMI unit, not in any other device.

If you already have the screen data backup, please go to "3-1. Replacement Procedure – Change model to recommended substitute unit (GP-Pro EX)".

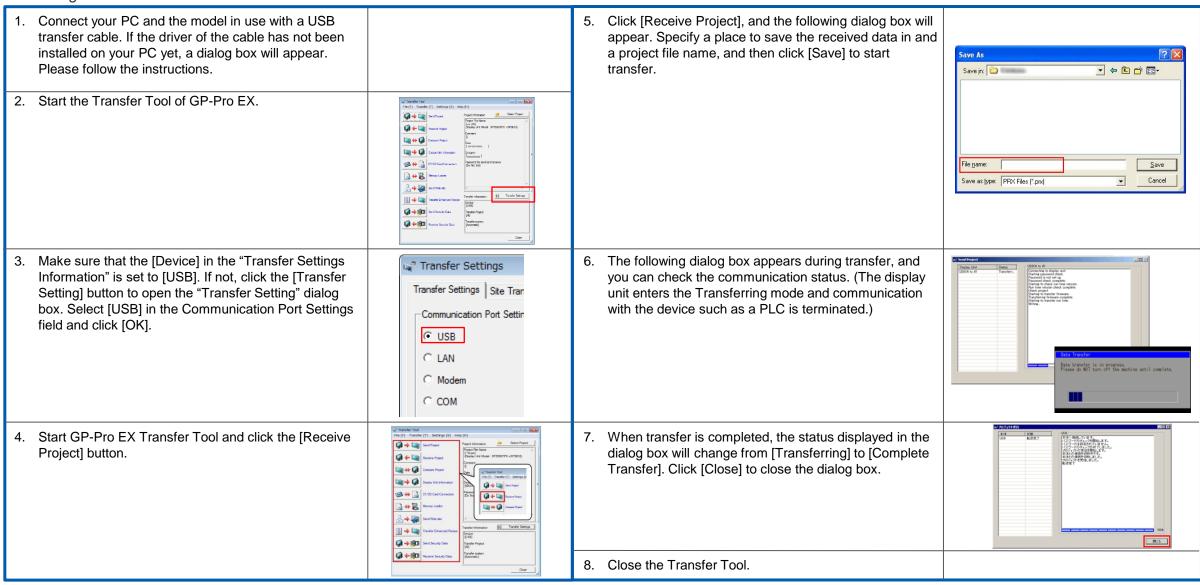


<sup>\*2:</sup> Please use the same or later version of the software used when creating screens on the old model. If you don't know the software version, we recommend that you use the latest one. You can download the latest transfer tool from our website.

https://www.pro-face.com/otasuke/

# 3-1. Replacement Procedure – Receive Screen data from the model in use (GP-Pro EX)

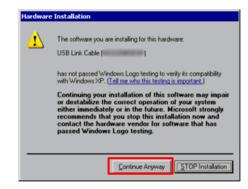
In this section, we will introduce how to receive screen data with a USB transfer cable as an example. If you have the backup of screen data, this step is not necessary. Please go to the next section.



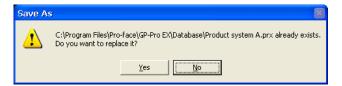
# 3-1. Replacement Procedure – Receive Screen data from the model in use (GP-Pro EX)

#### **NOTES**

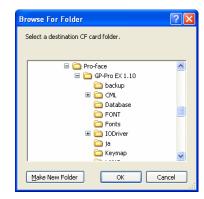
• The "Hardware Installation" dialog box as shown on the right may appear during installing the USB driver depending on the security level of Windows®. Click [Continue Anyway] to start installing the driver. When installation is completed, click [Finish].



When the file already exists, a window will appear asking if you want to overwrite the file.

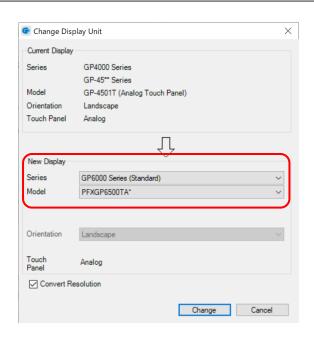


When receiving a project file that uses SD card/USB memory data such as Recipe Function (CSV data), the following dialog box will appear during the transfer. Please specify where to save the data.
 Click [OK] to return to the [Receive Project] dialog box and complete the transfer.



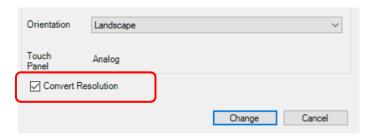


## 3-1. Replacement Procedure – Change model to recommended substitute unit (GP-Pro EX)



Change the Display unit from GP4000 Series to GP6000 Series (Standard). The display can be changed from the menu bar "Project" → "System Settings" → "Display" → "Change Display" in GP-Pro EX.

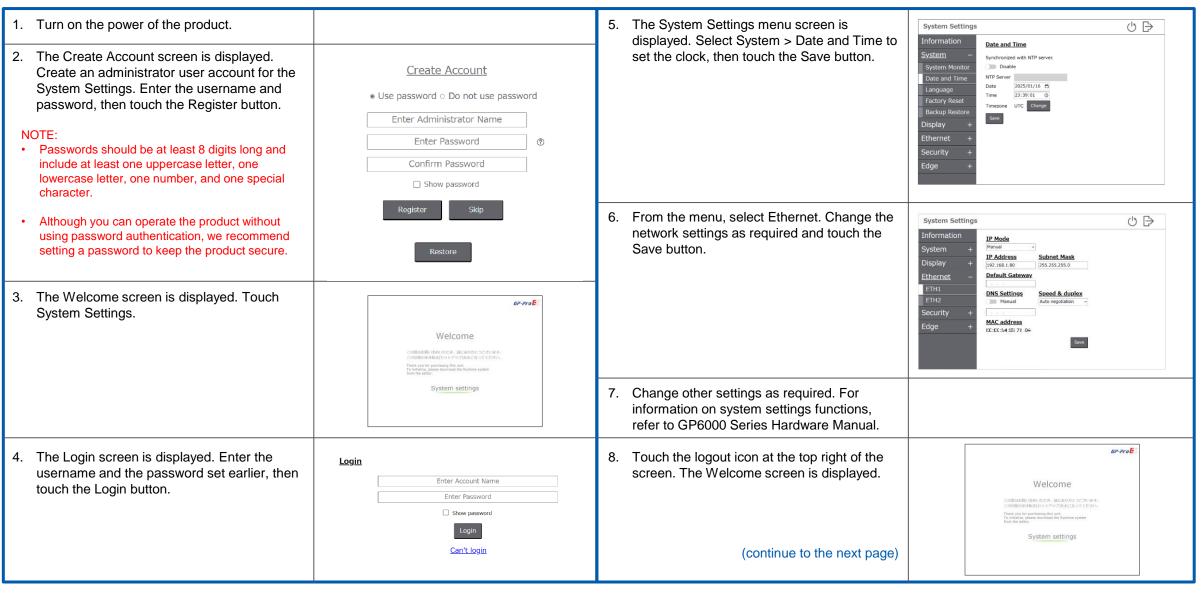
If you check on [Convert Resolution] when changing the Display Unit type (as shown below), you can adjust both size and location of the part and the text relative to the display resolution automatically. But still, you may need to adjust them manually. Please pay attention to the following points.



- A function that requires absolute coordinates. Please adjust the settings manually.
  - Global window
  - Position Animation
- · Due to font size and resolution restrictions, manual changes may be required. Please resize them if needed
  - Font: In the case of using Standard font, the size will be smaller. You can improve by using Stroke font or Image font.
  - Objects
  - Parts
  - Images
  - Alarm parts
- Position may differ from the original project. Please check the coordinate of the window and adjust if needed.
  - Window display

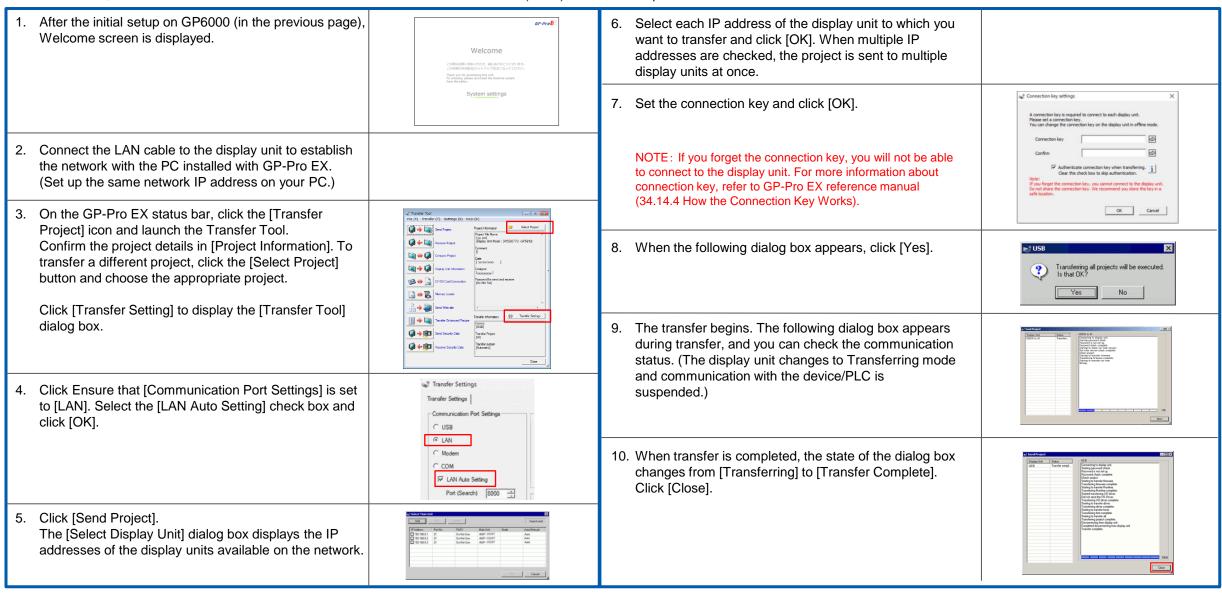
# 3-1. Replacement Procedure – Transfer screen data to recommended substitute unit (GP-Pro EX)

After turning on the product for the first time, perform the system setup. For the detailed procedure, refer to **System Settings** section in GP6000 Series Hardware Manual.



## 3-1. Replacement Procedure – Transfer screen data to recommended substitute unit (GP-Pro EX)

In this section, we will introduce how to transfer screen data via Ethernet (LAN) as an example.



# 3-2. Software Compatibility - GP-Pro EX Supported Feature Comparison

GP-Pro EX Feature		PFXGP4401TAD***	PFXGP6400TAD*
Display	Screen Area (Application memory, unit: byte)	32M	64MB
	Portrait Installation	<b>✓</b>	To be supported (Schedule: TBD)
	Function Expansion Memory	-	-
	Installing the USB/RS-422/485 Conversion Adapters	<b>√</b>	To be supported (Schedule: TBD)
	MAC Address Display	<b>V</b>	<b>V</b>
	CF Card	-	-
	SD Card	<b>✓</b>	V
External Storage	CFast Card	-	-
	USB storage	<b>✓</b>	V
	FTP server	<b>V</b>	V
	Drawing in 256 colors	<b>V</b>	V
	Reverse Display	<b>v</b>	-
	Blink	<b>V</b>	-
	Faded Color Blink	<b>V</b>	-
	Synchronize Text Display with Text Table	<b>V</b>	V
System Settings	Time Zone settings	-	<b>√</b> *1
	Enhanced System Password	<b>V</b>	V
	Detect Backlight Burnout	-	-
	Dimmer settings	<b>v</b>	<b>√</b> *2
	2-point touch / Multitouch	<b>V</b>	V
	Display the SD/USB Removal Icon	V	V

<sup>\*1:</sup> Set in System Configuration. \*2: While dimmed, brightness settings you can use are 0 to 100.

# 3-2. Software Compatibility – GP-Pro EX Supported Feature Comparison

GP-Pro EX Feature		PFXGP4401TAD***	PFXGP6400TAD*
Occidente Colline	Screen Capture	<b>✓</b>	<b>✓</b>
	SRAM Auto Backup	<b>✓</b>	V
	Image Font	<b>✓</b>	V
System Settings	Bitmap Font	<b>✓</b>	V
	Standard Font	<b>✓</b>	<b>✓</b>
	Port Control	<b>✓</b>	V
	Number of Devices/PLCs that can communicate simultaneously	4	4
	Specify Indirect Device	<b>✓</b>	<b>✓</b>
Device/PLC	Import Device/PLC tags	<b>✓</b>	V
Communication *1	Ethernet Multilink	<b>✓</b>	V
	Device Monitor	<b>✓</b>	V
	Ladder Monitor	-	-
	LAN Transfer	<b>✓</b>	V
	USB Transfer	<b>✓</b>	V
	Modem Transfer	<b>✓</b>	-
Transfer	SIO Transfer (COM Connection)	<b>✓</b>	-
	Memory loader feature	<b>✓</b>	<b>✓</b> *2
	CF/SD Card Connection	<b>✓</b>	V
	Connection Key	<b>✓</b>	V

<sup>\*1:</sup> Depends on the type of connected PLC/Device.

<sup>\*2:</sup> Set in System Configuration.

# 3-2. Software Compatibility - GP-Pro EX Supported Feature Comparison

GP-Pro EX Feature		PFXGP4401TAD***	PFXGP6400TAD*
	Change Backlight Color	-	-
	Clock Update Settings	V	V
	Start Screen Settings	V	V
	Date format on CSV file output	<b>v</b>	V
	Divide destination folders by file numbers	V	V
	Increase Alarm Type [Extended] settings and Text Table index numbers	V	V
	Alarm Message Multiple Line Display	V	V
	Attach Data Value to Operation Log	V	V
	Changing passwords at run time (CSV file)	V	V
Common Settings	Changing passwords at run time (password change screen)	<b>✓</b>	V
Ü	Append Date/Time to CSV File Name	V	V
	Transfer sampling CSV file to FTP	V	V
	Transferring sampled data to the cloud	V	V
	Indirectly specify Sampling Frequency and Alarm Settings	<b>✓</b>	V
	Sampling data/Enhanced recipe data format co-exist	<b>∨</b>	V
	Create a recipe (CSV data) index file at runtime	<b>✓</b>	V
	Enhanced Recipes	V	V
	Extended Script copy file function	<b>✓</b>	<i>V</i>
	Global Trigger	V	<b>V</b>

# 3-2. Software Compatibility – GP-Pro EX Supported Feature Comparison

GP-Pro EX Feature		PFXGP4401TAD***	PFXGP6400TAD*
	Movie record/play feature	-	-
Common Settings	Use Image unit	-	-
	Sound Output Feature	-	-
J.	AUX	-	-
	Retentive Variables Function	V	V
	Selector List	V	V
	XY Graph (Historical Trend, Data Block Display Graph)	V	V
	Picture Display [CF Image Display] / [SD Image Display] for showing JPEG files	<b>✓</b>	<b>✓</b>
	Indirectly specify a block of Alarm parts	V	<b>✓</b>
	Special Data Display [File Manager] sort function and default path	V	V
Parts	Special Data Display [File Manager] copy file to FTP	V	V
rans	Message Display's Bulletin Message	V	V
	Image Sensor Display	V	V
	Animation	V	V
	Alarm History Message Flow Display	V	V
	Alarm History / Sampling Data / Enhanced Recipe Data Refine Search / Sort Function	<b>✓</b>	To be supported (Schedule: TBD)
	Alarm Analysis Function	V	To be supported (Schedule: TBD)
	Logic Program Operation	V	V
Logic *1	I/O Driver	-	-
	Function Block	V	V

<sup>\*1:</sup> Unable to use with USB-Serial (RS-232C) adaptor cable or USB/RS-422/485 conversion adapter.

# 3-2. Software Compatibility – GP-Pro EX Supported Feature Comparison

GP-Pro EX Feature		PFXGP4401TAD***	PFXGP6400TAD*
	RPA Function (end of support from Ver.4.09.400)	-	-
	GP-Viewer EX	V	To be supported (Schedule: TBD)
	FTP Function	V	<b>✓</b> *1
	Web Server (end of support from Ver.4.09.450)	-	-
	Camera-Viewer EX	-	-
Notwork	Pro-face Remote HMI	V	To be supported (Schedule: TBD)
Network	E-mail	V	To be supported (Schedule: TBD)
	GP Remote Printer Server	V	V
	Pro-face Connect (models you can register as SiteManager)	V	To be supported (Schedule: TBD)
	IPsec	V	To be supported (Schedule: TBD)
	DHCP Function	-	-
	Pro-Server EX	V	To be supported (Schedule: TBD)
	USB Keyboard	V	V
Lancet Environment /	EZ Illuminated Switch	V	To be supported (Schedule: TBD)
Input Equipment / Peripheral Equipment (USB Device)	EZ Tower Light	V	To be supported (Schedule: TBD)
	EZ Numpad (end of sale)	V	-
	EZ Fingerprint Recognition Unit (end of sale)	V	-
	EZ LAN Adapter	V	

<sup>\*1:</sup> Supports encryption of transmission data using FTPS.

# 3-2. Software Compatibility – Supported Software Version

Supported Software	PFXGP4401TAD***	PFXGP6400TAD*	Compatibility of Project Data
GP-Pro EX	V	✔ Ver. 5.00.000 or later	,
GF-FIU EX	https://www.pro-face.com/otasuke/files/manual/gpproex/new	ı/refer/gpproex.htm	•
Pro-Server EX	V	To be supported (Schedule: TBD)	
PIO-Server EX	https://www.pro-face.com/otasuke/files/manual/soft/server_e	-	
Pro-face Remote HMI	V	To be supported (Schedule: TBD)	
(iOS/Android)	https://www.pro-face.com/otasuke/qa/remotehmi/faq.html		-
Pro-face Remote HMI	V	To be supported (Schedule: TBD)	
Client for Win	https://www.proface.com/en/product/soft/remotehmi_client/d	-	
Dro food Connect	<b>✓</b>	To be supported (Schedule: TBD)	
Pro-face Connect	https://www.proface.com/en/product/soft/proface_connect/de	<u>ownload</u>	•

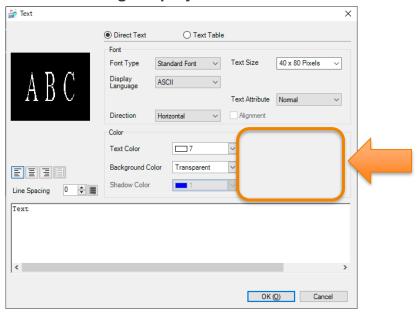


# 3-3. Other Important Notes on Software

- About Blink function
  - GP6000 Series do not support Blink function. Therefore, if you use the blink settings in GP4000 Series, the settings will be
    cancelled after changing the display to GP6000 Series in GP-Pro EX.

# GP4000 Series Fext Direct Text Text Attribute Direction Horizontal Line Spacing Text Color Shadow Color Text Shadow Color Text OTEXT Table Font Font Font Type Display ASCII Text Attribute Nomal Blink Blink None Blink None Blink None Blink None Color Text Color Text Color Text Color Text Shadow Color Text Color Text Color Text Color Text Blink None Blink None Color Color Text Color Col

#### After converting the project to GP6000 Series



**NOTE:** We have a workaround to add blink functions to some of the parts/texts on GP6000 display by using the functions of the configuration software, GP-Pro EX. Refer to the following FAQ for the setting procedures.

https://www.proface.com/en/support/faq/FAQ000268649



