

### **A**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, serious injury, or 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.
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### **Product Guide 2019**

### by Schneider Electric



# NEW LINEUP



to accelerate onsite IoT.

<sup>page</sup> 17

page 11

model that is compact and optimal for data collection.

# Find the best HMI from our range of products.

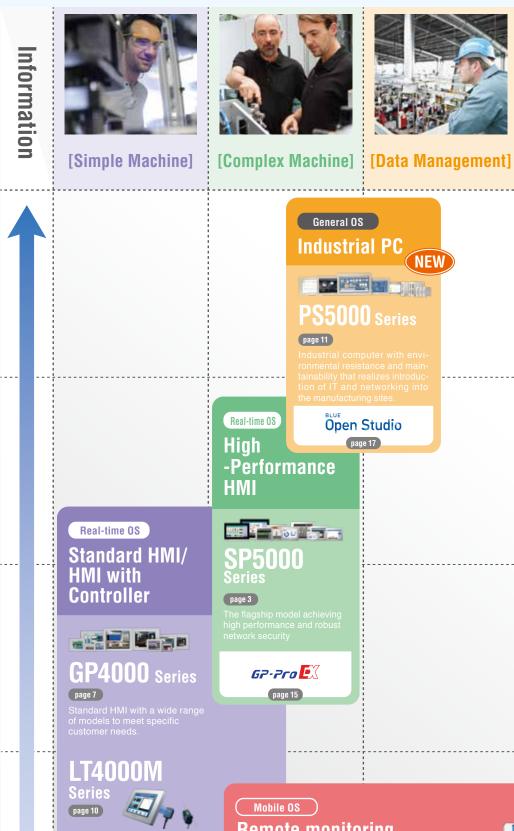
General OS **Industrial PC** 

PS5000 Series

Open Studio

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GP-Pro page 15





[Outdoor]

NEW Real-time OS **Outdoor HMI** SP5000X page 5 Environmentally resistant for use in harsh operating conditions. GP-Pro page 15



### Advanced HMI

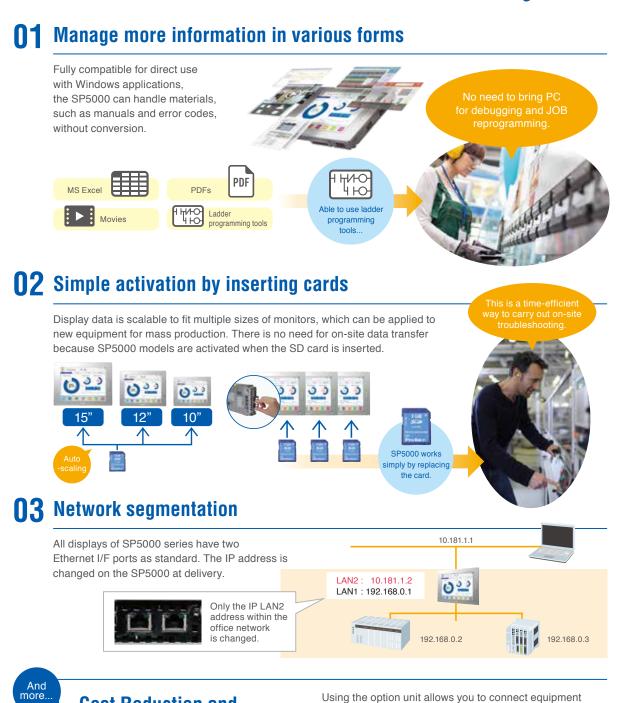
# SP5000 Series

Flagship model achieving high performance and robust network security

The SP5000 series is an HMI that provides information quickly and efficiently, and promotes "smartification" of your factories.



Flagship



that requires simple control + HMI, additional I/O

expansion and remote I/O expansion.

Cost Reduction and Equipment Improvement with I/O expansion

03

		Pre	mium Dis	play						
	[Multi-touch][/	Auto-scaling ] [B	rightness sensor	] [ Front USB (T	ype A & mini B) ]					
					¥ 1.5	<mark>ند ی</mark>				
SP-5800WC 19" wide	SP-570 15" w		2-5700TP 15"	SP-5660TP 12"	SP-5600TP 12"	SP-5500TP 10"				
	SP-5800WC	SP-5700WC	SP-5700TP	SP-5660TP	SP-5600TP	SP-5500TP				
Model	PFXSP5800WCD	PFXSP5700WCD	PFXSP5700TPD	PFXSP5660TPD	PFXSP5600TPD	PFXSP5500TPD				
Display Size	19" wide	15" wide	15" 12" 10"							
Rated Input Voltage			122	4 Vdc						
Resolution	1,366 x 768 pi	xels (FWXGA)	1	1,366 x 768 pixels (FWXGA) 1,024 x 768 pixels (XGA) 800 x 600 pixels (SV						
Touch Panel Type	Projected Capacitive (5 points multi-touch) Resistive Film (analog, 2 points multi-touch)									
rouch i aner type	Projected Capacitive	(5 points multi-touch)		/ I (	/	1 1 1 7				
	Projected Capacitive	(5 points multi-touch)		/ I (	/	1 7				
Interface Structure	Projected Capacitive	(5 points multi-touch)		Resistive Film (analog USB (mini B) x 1	/	1 1 1 7				
Interface	W483 x H337 x D69mm		USB (Type A) x 1	Resistive Film (analog USB (mini B) x 1	, 2 points multi-touch) 1 x D67mm	1 1 1 7				
Interface Structure	W483 x H337 x D69mm	W414 x H295 x D69mm	USB (Type A) x 1 IP65F, W397 x H296 x D67mm	Resistive Film (analog USB (mini B) x 1 IP67F W315 x H24	, 2 points multi-touch) 1 x D67mm 9 x D2.64 in.) 1227.5mm	W272.5 x H214.5 x D67mm				
Interface Structure External Dimensions*	W483 x H337 x D69mm (W19.02 x H13.27 x D2.72 in.) W465 x H319mm	W414 x H295 x D69mm (W16.30 x H11.61 x D2.72 in.) W396 x H277mm	USB (Type A) x 1 IP65F, W397 x H296 x D67mm (W15.6 x H11.7 x D2.64 in.) W383.5 x H282.5mm	Resistive Film (analog USB (mini B) x 1 IP67F W315 x H24 (W12.4 x H9.4 W301.5 x H (W11.87 x	, 2 points multi-touch) 1 x D67mm 9 x D2.64 in.) 1227.5mm	W272.5 x H214.5 x D67mm (W10.73 x H8.44 x D2.64 in.) W259 x H201mm				
Interface Structure External Dimensions* Panel Cut Dimensions	W483 x H337 x D69mm (W19.02 x H13.27 x D2.72 in.) W465 x H319mm	W414 x H295 x D69mm (W16.30 x H11.61 x D2.72 in.) W396 x H277mm	USB (Type A) x 1 IP65F, W397 x H296 x D67mm (W15.6 x H11.7 x D2.64 in.) W383.5 x H282.5mm (W15.1 x H11.12 in.)	Resistive Film (analog USB (mini B) x 1 IP67F W315 x H24 (W12.4 x H9.4 W301.5 x H (W11.87 x	, 2 points multi-touch) 1 x D67mm 9 x D2.64 in.) 1227.5mm H8.96 in.)	W272.5 x H214.5 x D67mm (W10.73 x H8.44 x D2.64 in.) W259 x H201mm				

### Advanced Dianla **NEW** SP-5600TA SP-5600WA 12.1" 12" wide 022 SP-5500WA SP-5400WA 10" wide 7" wide

SP5000 is a

Microsoft Azure

certified device.

THE PARTY

H

Reliable Real-time OS New High performance HMI

Reliable Real-time OS High performance & expandable HMI

CANopen Master Unit FLEX NETWORK Master Unit PROFIBUS DP Slave/MPI Unit

Open Box SP-5B41

Power Box

SP-5B10

Advan	Advanced Display									
	SP-5600TA SP-5600WA SP-5500WA			SP-5400WA						
Model	PFXSP5600TAD	PFXSP5600WAD	PFXSP5500WAD	PFXSP5400WAD						
Display Size	12.1"	12" wide	10" wide	7" wide						
Rated Input Voltage		122	4 Vdc							
Resolution	1,024 x 768 pixels (XGA)	1,280 x 800 p	ixels (WXGA)	800 x 480 pixels(WVGA)						
Touch Panel Type		Resistive F	ilm (analog)							
Interface			-							
Structure	IP	66F, IP67F, TYPE 4X	(Indoor Use Only) /	13						
External Dimensions*	W315 x H241 x D67 mm (W12.4 x H9.49 x D2.64 in.)	W308.5 x H230.5 x D67mm (W12.15 x H9.07 x D2.64 in.)	W268.5 x H198.5 x D67mm (W10.57 x H7.81 x D2.64 in.)	W203.6 x H148.6 x D67mm (W8.02 x H5.85 x D1.42 in.)						
Panel Cut Dimensions	W301.5 x H227.5mm (W11.87 x H8.96 in.)	W295 x H217mm (W11.61 x H8.54 in.)	W255 x H185mm (W10.04 x H7.28 in.)	W190 x H135mm (W7.48 x H5.31in.)						
Others			-							
Custom (Coating)		Ye	es							
Custom (Front Color Bezel)		Ye	es							

\* The depth is combined with Box Module

### The modular design of the SP5000 allows various combinations of components.

Easy to maintain and replace

### **3 types of Box Modules**

Enable to utilize Windows Applications together with HMI (equipped with HMI Runtime standard) SP-5B41 SP-5B10 SP-5B00 PFXSP5B41 PFXSP5B10 PFXSP5B00 Model Screen Size: 64 MB Application Memory NVRAM 320KB Backup Memory RS-232C / 422 / 485 x 2 Ethernet x 2 USB (Type A) x 3, USB (mini B) x 1 RS-232C / 422 / 485 x 2 Ethernet x 2 USB (Type A) x 2, USB (mini B) x 1 RS-232Cx 1 RS-422 / 485 x 1 SD Card Slot (Storage) x 1 CFast Card Slot (System) x 1 SD Card Slot (System) x 1 SD Card Slot (Storage) x 1 Ethernet x 2 USB (Type A) x 2, USB (mini B) x 1 CFast Card Slot (Storage) x 1 DVI-D output x 1 Interface Speaker Output x 1 Alarm Output or Buzzer Output x 1 SD Card Slot (Storage) x 1 Sound Input: MIC or LINE input x 1 Speaker Output x 1 Expansion units available Alarm Output or Buzzer Output x 1 Windows Application Yes Expansion Unit Yes Connectable Devices 4 Custom (Coating) Yes Standard Box SP-5B00

Hardware

04

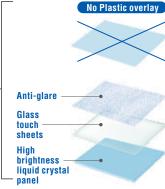
# SP5000X Series

# An outdoor HMI that is visible under sunlight, and resists extreme environment

We have created a sunlight readable screen that is resistant to direct sunlight and extreme temperatures. With an enhanced information display unit and improved operability, this product is suitable for multiple applications under harsh environmental conditions including use in special purpose vehicles such as firetrucks and construction equipment; parking lots and gas stations; and the oil and gas industry.

# **01** Sunlight Readable







Extreme

#### Anti-reflection (Anti-glare) Improve visibility in sunlight by decreasing

Improve visibility in sunlight by decreasing glare.

### High-transmittance design

The liquid crystal display uses a glass touchscreen to improve transmissivity.

# **02** Robustness



### **UV Protection**

Improve UV protection and prevent deterioration by replacing plastic components that are exposed to sunlight with metal or glass.



### **Full Coating**

Improve the longevity of the product even when used in outdoor environments with dust and extreme temperatures by adding coating on the substrate, LCD, and power source components.

### **03** Environmental Resistance



Sufficient against Vibration/Shock

We do apply IEC60068-2-6 or IEC60068-2-27 in stead of IEC61131-2 test which is typically used for factory automation devices.

Because they are more suitable for earth moving machines, or generators or compressors which use engines to operate machines.

\* Display Module : 7"w and 12"w: 2G / 40G, 15"w: 1G / 15G Box Module : follow the connected Display Module.



**Operating temperature: -30°C to 70°C** Can be used in harsher environments without the need for anti-frost heaters or fans and cooling systems.

\* Display Module : 7"w: -30 to 65°c, 12"w: -30 to 70°c, 15"w: -20 to 60°c Box Module : follow the connected Display Module.





# **04** Maintainability



### Modular structure that is easy to maintain

It is possible to replace the exposed display without changing the whole unit. The box is designed with the application pre-installed and can be used immediately upon changing components. Changes can be made quickly and easily without the need of a PC, optimizing time and resources.

# **05** IoT Solution



#### Data collection and remote maintenance

Collect data remotely from a PC such as error history and operation status, outcome, and history. It is also possible to access the HMI, verify the operation status, and conduct maintenance remotely via PC or tablet.

# **Display Module**









00

	SP-5790WA	SP-5690WA	SP-5490WA			
Model	PFXSP5790WAD	PFXSP5690WAD	PFXSP5490WAD			
Display type	TFT Color LCD (High brightness)					
Display size	15.6" wide	12.1" wide	7" wide			
Resolution	1,366 x 768 pixels (FWXGA)	1,280 x 800 pixels (WXGA)	800 x 480 pixels (WVGA)			
Display colors		262,144 colors				
Backlight	White LED (Not user rep	blaceable. When replacement is required, co	ntact customer support.)			
Touchpanel lifetime		1,000,000 times or more				
Rated input voltage		1224 Vdc				
Power consumption	Max. 48 W	Max. 37 W	Max. 29 W			
Ambient air temperature	-20 to 60 °C (-4 to 140 °F)	-30 to 70 °C (-22 to 158 °F)	-30 to 65 °C (-22 to 149 °F)			
Dust	0.1	mg/m3 (10-7 oz/ft3) or less (non-conductive lev	vels)			
Pollution degree		3 for front face, 2 for other sides				
Atmospheric pressure (operating altitude)		800 to 1,114 hPa (2,000 m [6,561 ft] or lower)	)			
UV resistance (front side)		Cutoff: 99% or more (380 nm)				
Vibration resistance	IEC 60068-2-6 compliant 5 to 9 Hz Single amplitude 3.5 mm (0.14 in) 9 to 150 Hz Kied acceleration: 9.8 m/s <sup>2</sup> X, Y, Z directions for 10 cycles (approximately 100 minutes) IEC 61373: 1999 (Category 1, Class B) 5dst150 Hz (weight < 500 kg: f1=5 Hz, I2=150 Hz) acceleration: Up and down: 7.90 m/s <sup>2</sup> , Right and left: 3.50 m/s <sup>2</sup> , Back and forward: 5.50 m/s <sup>2</sup>	IEC 60068-2-6 compliant 5 to 9 Hz Single amplitude 7 mm (0.28 in)				
Shock resistance	IEC 60068-2-27 compliant 147 m/s², 11 ms, X, Y, Z directions for 3 times	IEC 60068-2-27 compliant 392 m/s², 11 ms, X, Y, Z directions for 3 times				
Electronic fast / transient / burst immunity	IEC	61000-4-4 / 2 kV: Power port / 1 kV: Signal p	ports			
Electrostatic discharge immunity	Contact discharge me	ethod: 6 kV Air discharge method: 8 kV (IEC/I	EN 61000-4-2 Level 3)			
Structure		IP66F				
External dimensions	408 x 264 x 68 mm (16.06 x 10.39 x 2.68 in)	308.5 x 230.5 x 68 mm (12.15 x 9.07 x 2.68 in)	203.6 x 148.6 x 37 mm (8.02 x 5.85 x 1.45 i			
Front bezel materials		Aluminum die-cast / Stainless steel				



### The Modular Design of the SP5000X

## **Box Module**



SP-5B90

	SP-5B90
Model	PFXSP5B90
Application Memory	Screen Size: 64 MB
Backup Memory	NVRAM 320KB
Interface	RS-232C / 422 / 485 x 2, Ethernet x 2, USB (Type A) x 2, USB (mini B) x 1, SD Card Slot (System) x 1, SD Card Slot (Storage) x 1, Speaker Output x 1, Alarm Output or Buzzer Output x 1
Expansion unit	Fieldbus Unit x 1
Connectable Devices	4

# Standard HMI **GP4000** Series

### Varied and flexible lineup satisfying customers needs

Combines abundant functions with a broad line-up of versatile models to meet the specific needs of every customer.



### **01** Widest line-up in the Pro-face brand

From classic to unique, we offer a wide range of choices to meet any application.



# **02** Compatible with our legacy models



Data in GP-PRO/PBIII for Windows or later is convertible using project converter. Smooth transition to the latest models.

Model : PFXZCCEUSG1

# USB expansion options unique to Pro-face

### Reduce excess inventory of indicator lights

EZ Tower Light Model : PFXZCETWHA1 (tube mounting with fixing plate) Model : PFXZCETWW1(base mounting) With this single model, multiple colors and sounds can be set.

Capable of indicating the state of equipment.

Buzzer patterns: 4

Work-saving for inputting

EZ Numpad Model : PFXZCCEUKB1

Reduces screens needed for value input

Alphanumeric and customizable

(Set by HMI design software) Protection: IP65 Mount: 22¢ circular

function keys

mounting hole



repeated values

LED lamps adaptable to various types of setting Configuration from HMI 4 colors (red, green, blue, and yellow) and 3 modes (off, on, and blink) Number of lamps: 3

### Even more improved security

Model : PFXZCCEUSS1 Prevents spoofing by changing from ID / PW to fingerprint authentication. Combination with operation logs enables accurate tracking of access





**Combining switch and lamp** 

Improve visibility with 6-color illumination.

Reduce man-hours for control panel installation and wiring

EZ Illumination Switch



#### Adding second LAN port with independent IP address

Model : PFXZCGEUUE1 The GP4000 series also allows you to securely set up a network.

Same functions as built-in LAN po 10BASE-T / 100BASE-TX Limited to GP4000 standard models

Also can be used with Pro-face products other than GP4000 series.

### **Standard models**



	GP-4601T	GP-4603T	GP-4501T	GP-4503T	GP-4401T	GP-4301T	GP-4303T	GP-4201T
Model	PFXGP4601T**	PFXGP4603TAD	PFXGP4501T**	PFXGP4503TAD	PFXGP4401TAD	PFXGP4301TAD PFXGP4303TAE		PFXGP4201TAD
Display Size	12	.1"	10	).4"	7.5"	5	.7"	3.5"
Rated Input Voltage	100240 Vac / 24Vdc	24Vdc	100240 Vac / 24Vdd	24Vdc		24	Vdc	
Resolution	800 x 600pi	xels (SVGA)	640 x 480p	oixels (VGA)		320 >	240pixels (QVG	A)
Touch Panel Type	Re	sistive Film (anal	og)		Re	sistive Film (anal	log)	
Application Memory			32MB				16MB	
Data Backup				SRAM	320KB			
Interface		RS-232C x 1,RS-422/485 x 1*,Ethernet x 1         RS-232C/422/4           USB(Type A) x 1,USB(mini B) x 1,SD Card Slot x 1         Ethernet 1,USB(type A)						
Structure				IP	35F			
External Dimensions				14.5 x D57mm .44 x D2.24 in.)	W218 x H173 x D60mm (W8.59 x H6.81 x D2.37 in.)		37 x D59.5mm 39 x D2.34 in.)	W132 x H106 x D42mr (W5.2 x H4.17 x D1.65 in.)
Panel Cut Dimensions	W301.5 x H227.5mm (W11.87 x H8.96 in.)         W259 x H201mm (W10.2 x H7.91 in.)         W204.5 x H159.5mm (W8.05 x H6.28 in.)         W156 x H123.5m (W6.67 x H4.86 in.)					W118.5 x H92.5mm (W4.67 x H3.64 in.)		
Connectable Devices					4			
Custom (Coating)				Y	es			
Custom (Front Color Bezel)				Y	es			
Rear Mount model (GP4000R)	Model:PFXG	P4601TADR	Model:PFX0	GP4501TADR	Model:PFXGP4401TADR	Model:PFX0	GP4301TADR	-
External Video Unit-supporting Model	Model:PFX	ne:GP-4621T GP4621TAA GP4621TAD ng:Yes)	Model:PFX	ne:GP-4521T GP4521TAA ng:Yes)	Best choice for replacement! VM or RGB unit from GP3000 can be used without additional settings.			

\*\* : [AA] Analog touchscreen & AC power supply; [MD] Matrix touchscreen & DC power supply; [AD] Analog touchscreen & DC power supply; [MA], Matrix touchscreen & DC power supply; \* : GP-4\*03T:RS-485 (isolation)

### W models



	GP-4501TW	GP-4401WW	GP-4301TW	GP-4201TW			
Model	PFXGP4501TADW	PFXGP4401WADW	PFXGP4301TADW	PFXGP4201TADW			
Display Size	10.4"	7"wide	5.7"	3.5"			
Rated Input Voltage		24	Vdc				
Resolution	640 x 480pixels (VGA)	800 x 480pixels (WVGA)	320 x 240pi	(QVGA)			
Touch Panel Type		Resistive F	ilm (analog)				
Application Memory	16	MB	81	IB			
Data Backup	SRAM 128KB						
Interface	,	2/485 x 1,Ethernet x 1, ni B) x 1,SD Card Slot x 1,	RS-232C x 1,RS-422/485 x 1 Ethernet x 1*, USB(Type A) x 1,USB(mini B) x 1,				
Structure		IPe	55F				
External Dimensions	W315 x H241 x D56mm (W12.4 x H9.47 x D2.20 in.)	W218 x H173 x D60mm (W8.59 x H6.8 x D2.37 in.)	W169.5 x H137 x D59.5mm (W6.67 x H5.39 x D2.34 in.)	W132 x H106 x D42mm (W5.2 x H4.17 x D1.05 in.)			
Panel Cut Dimensions	W301.5 x H227.5mm (W11.87 x H8.96 in.)	W204.5 x H159.5mm (W8.05 x H6.28 in.)	W156 x H123.5mm (W6.14 x H4.86 in.)	W118.5 x H92.5mm (W4.07 x H3.64 in.)			
Connectable Devices			2				
Custom (Coating)		Y	es				
Custom (Front Color Bezel)	Yes						



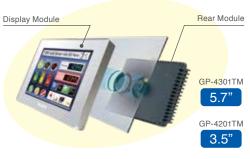


Flat design to protect from mounting surface from dust. Ideal for medical or food production equipment.

High	resolution a	nd full color in a small size				Person	4.3"	
01	Small-siz visibility	zed HMI but no comprom or operability	nises 02	Conne with a	ectivity a range o	f devices		
	480 x 272 pixel finely display	solution of s, information is ed despite the s of space.	,536 display			ows you to collected using a tal <i>Pro-Server</i> <i>62-Viewer</i>	x 🎽	
	Par	nel cut same as monochrome m	odel		Ethernet	USB Type A	<b>NT 11</b>	
	Monochron (GP-41	0**) (Model:PFXZCFAE	31)	4			<b>9</b> 🕼 🥄 🗢	
		GP-4114T	GP-4115T			-4115T3	GP-4116T	
Model		PFXGP4114T2D	PFXGP4115T2D				PFXGP4116T2D	
	ly Size Input Voltage			4.3" 1224 Vdc				
Resolu				480 x 272 pixels				
	Panel Type			480 x 272 pixels Analog				
	ation Memory			8MB				
	p Memory	FLASH EPR	OM 128KB	GNIL		AM 320KB	FLASH EPROM 128KB	
Interfa		Ethernet x 1 USB(Type A) x 1,USB(mini B) x 1		RS-232C x 1 /pe A) x 1,USB(mini B) x 1			RS-422/485 x 1 USB(Type A) x 1 USB(mini B) x	
Structu	ire			IP65	F			
Extern	al Dimensions		W124.9 x H90.4 x	D38.8mm	1 (W4.92 x H3.5	6 x D1.53 in.)		
Panel (	Cut Dimensions	W112.5 x H	77.5mm(W4.43 x H3.05 in.) \	Nith Panel	cut adapter:\	W105 x H66mm(W4.	13 x H2.6 in.)	
	ctable Devices			2				

# **GP4000M** Modular model

Easily mounted on a control panel and replaced for maintenance through a  $\varphi$ 22 mm circular hole.



	GP-4301TM	GP-4201TM			
Model	PFXGM4301TAD	PFXGM4201TAD			
Display Size	5.7"	3.5"			
Rated Input Voltage	24\	′dc			
Resolution	320 x 240 pix	els (QVGA)			
Touch Panel Type	Ana	log			
Application Memory	81	IB			
Backup Memory	NVSRAM	128KB *1			
Interface	RS-232C/4 Ethern USB(Type A) x 1	et x 1			
Structure	IP65F				
External Dimensions	Display module: W163 × H129.4 × D17.5mm (W6.41 × H5.09x D0.64 in.) Rear module: W118 × H98.1 × D40.1mm (W4.04 × H3.88 × D1.57 in.)	Display module: W97.6 × H80 × D16.2mm (W3.84 × H3.14 × D0.63 in.) Rear module: W118 × H98.1 × D40.1mm (W4.04 × H3.88 × D1.57 in.)			
Panel Cut Dimensions	φ22.	5mm			
Connectable Devices					

# GP4000H Handy model



The latest handy display with high compatibility with the GP3000H models and reduced weight.

		GI	P-4311HT		Hard-type Direct-connect Cable	10m	GP3000H-CBLH-10M	
Model	PFXGP4311HTAD***		RS-232C/422/485 x 1,Ethernet x 1 USB(Type A) x 1,USB(mini B) x 1			3m	GP3000H-CBLS-3M	
Display Size	5.7"				Soft-type Direct-connect Cable	5m	GP3000H-CBLS-5M	
Rated Input Voltage	24Vdc		SD Card Slot x 1 Function Switch x 12 Switches:1a2b			10m	GP3000H-CBLS-10M	
Resolution	640×480 pixels (VGA)	Interface	<ul> <li>Position Enable Switch Output:2a</li> <li>Key Switch Output:1c</li> <li></li> <li></li></ul>		Hard-type Direct-connect Cable (with connector)	10m	GP3000H-CBLHD-10M	
Touch Panel Type	Analog	internatio			Soft-type Direct-connect Cable (with connector)	3m	GP3000H-CBLSD-3M	
Application Memory	32MB					5m	GP3000H-CBLSD-5M	
Structure	IP65F		Operation Output x 1			10m	GP3000H-CBLSD-10M	
Connectable Devices	3		External Buzzer Output x 1		Conversion Adapter	version Adapter AGP3000H-ADPCOM-		

# Touch PLC **LT4000M** Series

### Hybrid display with control function

Since the release of the world's first controller with display (CGP model) in 1996, our products have gained a reputation for enabling customers to save space as well as equipment costs. 5.7

### 01 Simple design without PLC

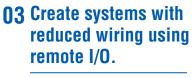
Connectivity with

a range of devices.

### 02 Easy to create control panels

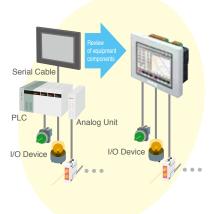
Easily retrofittable, requiring only 22¢ circular mounting holes

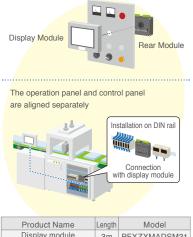
3.5



lexible

Compatible with European standard CANopen. Communicate with CANopen compatible slave units with LT as master





Display module /Rear module separation cable 5m PFXZXMADSM31 5m PFXZXMADSM51



DIO/AIO extended EX module Up to 7 units per HTB unit

	LT-43	01TM	LT-42	01TM		
Model	PFXLM4301TADD*	PFXLM4301TADA*	PFXLM4201TADD*	PFXLM4201TADA*		
Display Size	5.7" 3.5"					
Rated Input Voltage		24	Vdc			
Control	DIO	AIO+DIO	DIO	AIO+DIO		
Resolution		320 x 240pix	els (QVGA)			
Touch Panel Type		Resistive F	ilm (analog)			
Application Memory		16	MB			
Backup Memory		NVSRAI	VI 128KB			
Logic program area		FLASH EPP	ROM 132KB			
Variable area		NVSRA	M 64KB			
Interface	RS-232C/485 x 1 Ethernet x 1 USB(Type A) x 1 USB(mini B) x 1 CANopen (Master) x 1					
Structure		IPe	35F			
External Dimensions		× D17.5mm (W6.42 x H5.09 x D0.69 in.) D60.15mm (W5.03 x H4.25 x D2.36 in.)		× D16.2mm (W3.8 x H3.1 x D0.63 in.) D60.15mm (W5.03 x H4.25 x D2.36 in.)		
Panel Cut Dimensions		φ22.	5mm			
Connectable Devices			4			
Built-in DIO (Input)	20 points (configurable 2 x High Speed counter/Pulse catch or 1 Up/Down High Speed Counter)	12 points (configurable 2 x High Speed counter/Pulse catch or 1 Up/Down High Speed Counter)	20 points (configurable 2 x High Speed counter/Pulse catch or 1 Up/Down High Speed Counter)	12 points (configurable 2 x High Speed counter/Pulse catch or 1 Up/Dowr High Speed Counter)		
Built-in DIO (Output)	12 points (configurable 2 x PWM/Pulse)	8 points (configurable 2 x PWM/Pulse)	12 points (configurable 2 x PWM/Pulse)	8 points (configurable 2 x PWM/Pulse)		
Built-in AIO (Input)	0 points	4 points (Voltage/Current x2 - Temperature input x2 included)	0 points	4 points (Voltage/Current x2 - Temperature input x2 included)		
Built-in AIO (Output)	0 points	2 points (Voltage/Current x2)	0 points	2 points (Voltage/Current x2)		

# Industrial PC PS5000 Series





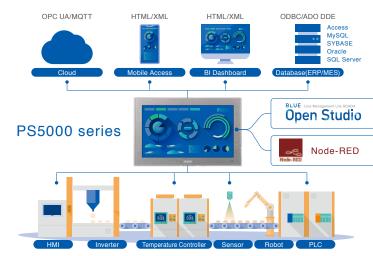
### Enter the Next Stage of Smart manufacturing with Pro-face Industrial PC

Powerful asing. Solution "IoT at manufacturing floor" connects machines and enables data visualization. As the needs of collaboration with management systems and a range of BI tools have been increasing. IoT at manufacturing floor has further evolved into Industry 4.0 or Smart Factory. Using highly reliable PS5000 Series and Lite SCADA software "BLUE Open Studio" and Node-Red allows you to smartly handle line management from visualization of equipment to edge control and connection to IT network.

#### Achieves smart manufacturing with PS5000 Series በ1

#### Visualize production targets and results with a connected database

Capture data for production, uptime/downtime and more to any SQL database. Using its embedded database interface, BLUE Open Studio can easily provide data from the production site to third-party systems (e.g. ERP,MES) or get data from them. And Pro-face has the Node dedicated for PS5000 available, you can create a dashboard that monitors status of PS5000 as well.



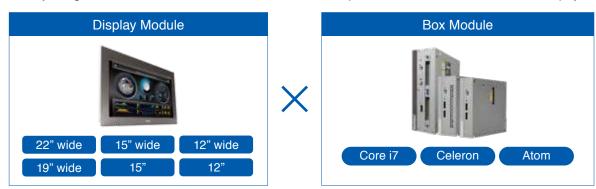
High connectivity with various devices BLUE Open Studio has over 250 built in drivers, supporting major PLC manufacturers such as Allen Bradley, Siemens, Schneider, Mitsubishi, Omron, as well as standard protocols MODBUS RTU/ASCII, profibus are included.

### **02** Reliable operation



# **Modular Type**

Combine the box type and the display in a range of sizes from 12 to the ultra-large 22 inches. Flexibily change the functions and sizes. The box is a stand-alone component and can be connected to various displays.



	Display Module									
	PS-5900W	PS-5800W	PS-5700W	PS-5700T	PS-5600T					
Display Size	22"wide	19"wide	15"wide	12"wide	15"	12"				
Rated Input Voltage		100240Vac / 24Vdc								
Resolution	1,920 x 1,080pixels (Full HD)	1,366 x 768pixels (FWXGA) 1,280 x 800pixels (WX0			) 1,024 x 768pixels (XGA)					
Touch Panel Type		Capacitive (5 sim		Resistive Film (single touch)						
Structure		IP66								

Box Module									
	PS-5	000B	PS-5001B						
Model	Core i7	Celeron	Atom			Atom(Entry)			
CPU	Core i7-4650U 1.7 GHz	Celeron 2980U 1.6 GHz		Atom E393	30 1.3 GHz				
Storage memory	HDD (500GB / 1TB) or SSD (128GB / 256	6GB) or CFast Card*1 (16GB*2 / 32GB)				eMMC (64 GB / 128 GB)			
Main Memory	8 GB or 16 GB, DDR3	4 GB or 8		4 GB, DDR3L					
Rated Input Voltage	24\	/dc		1224 Vdc					
OS	Win7 Ultimate (64bit) or WES7 (32 / 64bit) or Win8.1 Industry (64bit) or Win10 IoT Enterprise (64bit)				erprise (64b	pit)			
Interface	RS-232C / 422 / 485 x 1, Ethernet x				RS-232C x 1, RS-232C / 422 / 485 x 1, Ethernet x 2, USB (Type A) x 2, Display Port x 1				
Optional interface	x	2	None	х	:1	x 1			
Expansion Slot	0 slot or	2 slots	0 slot						

\*1 Only WES7 \*2 For secondary storage only.

# Slim Type

This integrated panel offers a drastically slimmer profile with less wasted space, while retaining the high performance. The optimized design is ideal for equipment that needs to save space. 19" wide 15" wide 10" wide

	PS-5811W	PS-5711W	PS-5701W	PS-5501W	PS-5821W (Enclosed Model)	
CPU	Core i3	1.7GHz	Atom 1	.75GHz	Core i3 1.7GHz	
Display Size	19"wide	15"	wide	10"wide	19"wide	
Rated Input Voltage		100240Va	ac / 24Vdc		24Vdc	
Resolution	1,366 x 768pixels 1,280 x 800pixels (FWXGA) (WXGA)				1,366 x 768pixels (FWXGA)	
Touch Panel Type	Capacitive (5 simultaneous touch)					
Main Memory	DDR3	(8GB)	DDR3	DDR3 (8GB)		
OS	Win7(64bit) / Win8.1 Industry (64bit) / Win10 IoT Enterprise (64bit) / WES7 (32 / 64bit)					
Main Storage	HDD (500GB / 1TB) / SSD (80GB / 180GB / 240GB) / CFast*1 (16GB*2 / 32GB) SSD (80GB / 180					
Expansion Slot			-			
Interface	USB (Type A) Speaker	85 x 2, Ethernet x 2 x 2, HDMI x 1 Output x 1 pansion x 1	RS-232C x 1 RS-232C / 422 / 485 x 1 Ethernet x 2 USB (Type A) x 2 Internal Expansion x 1			
Structure	IP66 IP66 IP66 (all arc					

\*1 Only WES7 \*2 For secondary storage only.

Data collection devices

# Multi-Converter

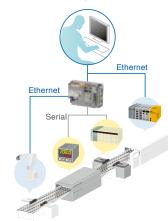
### Step Towards IoT

A multi-converter that offers a solution for data collection, connecting to a wide variety of equipment as well as PLC

Smart Gateway

# **01** Merge data from different devices

Unify protocols and collect data efficiently

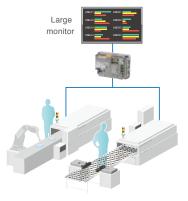


### 02 Tablet-based on-demand HMI

See status of equipment or devices in the right place at the right time.

**03** HMI for ANDON (Large-size monitor)

Optimize work by sharing production status.



### 04 Easily collect PLC data by network or USB memory

FLG		Export Read with PLC from various urers without program	LC from various			
	SP5000 (Open BOX) Model	SP5000 (Power BOX) Model	Multi-Converter	LT4000M Model		
Base module	PFXSP5B41	PFXSP5B10	PFXSP5B00	PFXLM4B01DAC PFXLM4B01DAK PFXLM4B01DDC PFXLM4B01DDK	PFXGM4B01D	
Adapter		PFXZCDADEXP1		PFXZXM	IADSA1	

FANUC limited model(Model:PFXLM4B01DAKFF) is available. Data collection from CNC of old machines

# Pro-face IoT Gateway

Even if the serial communication I/F is occupied, data can be collected by relaying between devices. Connectable without changing the program of the HMI and PLC. Data can be collected while maintaining communication of old devices.



### Screens can be expanded with industrial specifications for displays, industrial computers and personal computers.

As embedded displays with industrial specification, 3 types of DVI-D/Display Port/Ethernet connection are available. In addition, acquisition of overseas standards and installation of VESA are applicable.

### Flat Panel Monitors FP5000 series

Industrial flat panel display with high environmental resistance that allows multi-gesture control even when wearing gloves.

· Replaceable from FP3000 series

· Automatic scaling functions

· Windows XP compatibility



### Hi-Performance HMI **SP5000** Multi Display Adapter

Expansion unit for using the SP5000 series display as an Ethernet flat panel display.

Connectable up to 100 meters with one Ethernet cable Support both duplicate and extended mode, a touch operation exclusive control



Multi Display Adapter

### Industrial PC PS5000 Remote Display Adapter / Display Adapter

020

022

Extension unit for the SP5000 displays allowing you to add a high-quality, glass front display to a SP5000 host.



Receiver module for Display Adapter (PFXZPPDMPRX2) Transmitter module for Display Adapter (PFXZPPDMPTX2)

	FP-57001PD	FP-56001PD				
Model	PFXFP5700TPD	PFXFP5600TPD		Multi Display Adapter		Display Adapter
Display Size	15"	12"	Model	PFXZCDADEXR1	Model	PFXZPPDADDP2

	FP5000 Series	SP5000 Series Display	+ Multi Display Adapter	PS5000 Series Displa	y + Display Adapter
Touch Panel Type	Resistive Film (Analog)	Capacitive (5 simultaneous touch)	Resistive Film (Analog)	Capacitive (5 simultaneous touch)	Resistive Film (Analog)
Size	15" / 12"	19"wide / 15"wide	15" / 12"wide / 12" / 10"wide / 10" / 7"wide	22"wide / 19"wide / 15"wide / 12"wide	15" / 12"
Host	PS5000 / PS4600 / PE4000B/ SP5000 Open Box (SP-5B41) / General-purpose PC	SP5000 Open Box (SP-5B41) / PS5000 / PS4600 / PE4000B / General-purpose PC		PS5000 / General-purpose PC *2	
OS	WinXP (32 bit), WES2009 Win7 (32 / 64 bit), WES7 Win8 (32 / 64 bit) Win8.1 Industry (64 bit)	Win7 (32 / 64 bit), WES7 (64 bit) Win8 (32 / 64 bit) Win8.1 Industry (64 bit) Windows10 IoT Enterprise 2016 LTSB (64bit) *1		Win7 (32 / 64 bit), WES7 (64 bit) Win8.1 Industry (64 bit) Windows10 IoT Enterprise 2016 LTSB (64	
Video	DVI-D				Display Port
Touch	USB (Type B)	Ethernet Ethernet *3		USB (Type B)	
Distance to connect	5m (16ft.)	100m (	100m (328ft.)		5m (16ft.)
Rated Input Voltage	1224Vdc	122	4Vdc	100240Vac (	Option) / 24Vdc
Surrounding air temperature	060°C	06	0°C	05	55°C

\*1 will be supported \*2 when connecting to Ethernet, only PS5000 \*3 Additional items required to connect to Ethernet.



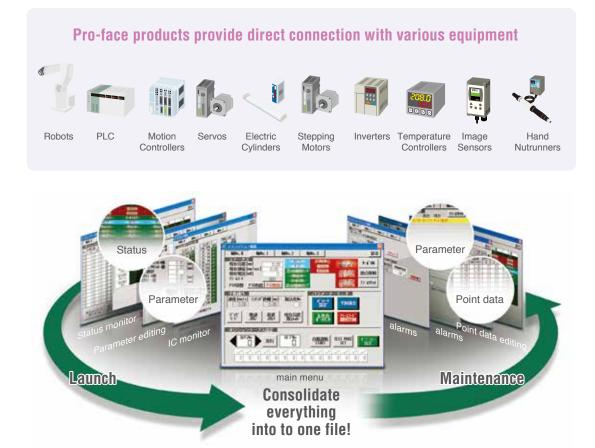
### Standard screen editor software

Enables HMI screen and logic programming. Screen customization can be performed with ease due to many functions that promote compatibility with legacy applications and reduce development time.



## **01** Connect directly to a wide range of devices

Largest number of drivers in the industry and many sample parts that enable connection with various manufacturers' equipment.



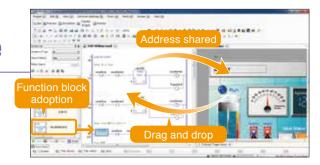
# **02** Leverage existing assets



Screen project files edited in the latest version can also be saved in the previous version.

### **03** Screen and logic can be edited with one software

Controller addresses can be used directly in the editor via drag and drop, thus reducing the development time.



# **04** Easy creation of bright, vivid screens

Check everything visually on-screen, just like with real switches and lamps.



And nore.



Use image fonts to expand design possibilities.



### **Ethernet multilink**

Multiple HMIs can be easily added or connected with a single control device using Ethernet.

### **Compatible with FTP client**

Data sampled by HMI can be saved as CSV on the FTP server.

# Runtime engine WinGP

Screens created by GP-Pro EX operate on a Windows OS-equipped machine using the Runtime engine.

Settings of WinGP are editable and device address read/write of

the connected device can be done by the user application.

database using dedicated API

### 01 Seamless communication 02 Cooperation with user with control equipment

No need to develop a driver to communicate with control equipment such as a PLC or temperature controller.

No drawing required in programming language





Model		Description		
PFXEXEDV**	HMI screen edit	or & logic programming software (DVD)		
PFXEXEDLS**	1 license	GP-Pro EX editor license (license key code)		
PFXEXGRPLS**10	10 licenses			
PFXEXGRPLS**25	25 licenses	GP-Pro EX Editor Group License (license key code)		
PFXEXGRPLS**50	50 licenses			
EX-WINGP-IPC	1 license	License for using WinGP on WinGP-compatible IPC (license key code)		
EX-WINGP-PCAT	1 license	License for using WinGP on PC/AT-compatible PC (license key code)		

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

# BLUE Line Management Lite SCADA Open Studio

### Flexible Software

Pro-face BLUE Open Studio is a development and runtime software that incorporates all of the tools users need to create SCADA HMI applications, dashboards and OEE interfaces.



	Capa
Scripting	Animation
Security	Database
Symbols	Events
Tags Database	Graphics and Design Tools
Troubleshooting	Trends
Gestures	Multi-Language
Alarms	ActiveX and .NET

ties	
Recipes	Email (SMTP)
Multi-touch	FTP
Reports	Historical Performance
Scalable	PDF Export
Scheduler	SSL Support for Emails
OPC	DDE Client
Intellectual Property Protection	Custom Widgets

#### Trends

Real-time and Historical trends, and SPC functionality are supported. Log data in binary format, or to any local or remote SQL database. Color or fill trends with graphic elements to enhance clarity of data. Date/ Time based or numeric (X/Y plot) trends give you the flexibility to display information that best suits your application. BLUE Open Studio supports direct connection to Historian.

#### Reports

Create clear, concise reports in plain text, RTF, XML, PDF, HTML, and CSV or integrate with Microsoft Office programs such as Excel. Get the data you need, in the format you need it, to make informed decisions, fast.

#### Support for Historian and AVEVA Insight

BLUE Open Studio includes support for saving historical data from some task worksheets to a Historian database or AVEVA Insight.



#### Scripting

Two powerful scripting languages are supported; built-in BLUE Open Studio functions and standard VBScript. Take advantage of widely available resources for VBScript. Both the native BLUE Open Studio scripting language and VBScript can be used simultaneously to give you the functionality you need, even from thin clients.

#### **Custom Widgets**

Custom Widgets provides the ability to integrate third-party web-based controls into the HMI/SCADA project screens. Develop and share a library of controls that can be easily integrated into an application and accessible through multiple platforms.

#### 21CFR PART11

Take advantage of built-in functionality to create 21 CFR part 11 compliant projects with traceability and e-signatures.



#### License Lineup

Product Name	No.of Licenses	No.of Tags	Model	Media
BLUE Open Studio for Supervision	1 License	64,000	PFXBOS*T64K*V80	DVD/Sticker
BLUE Open Studio for Line Management Plus	1 License	32,000	PFXBOS*T32K*V80	DVD/Sticker
BLUE Open Studio for Line Management	1 License	4,000	PFXBOS*T4K*V80	DVD/Sticker
BLUE Open Studio for Machine Control	1 License	1,500	PFXBOS*T1K*V80	DVD/Sticker
BLUE Open Studio Thin Cliant	1 License	-	PFXBOSTC	Sticker
BLUE Open Studio Import Wizard	-	-	PFXBOSTK	Sticker
BLUE Open Studio USB Hard key	-	-	PFXBOSUSBL	USB

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\* To version-up from Version 8.0 to 8.1, version-up licenses are required. In additon, upgrade licenses are available to upgrade (ex, from Line management plus to Supervision)

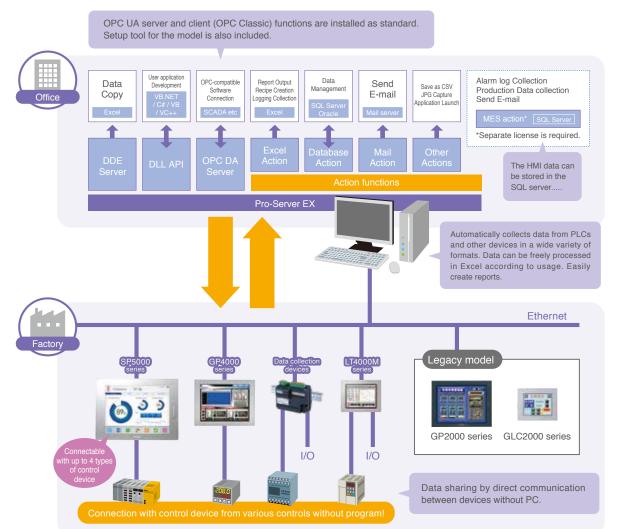


### A simple way to start networking to enhance the communication between the office and the manufacturing site.

Real-time visualization and analysis of data from production sites. Remote machine monitoring and transfer of work instructions to increase efficiency between the production site and the office.

### **01** Networking of the entire site to collect data collectively without programming

Collecting accurate information, and analyzing and utilizing all your data will lead to improvement in working processes!



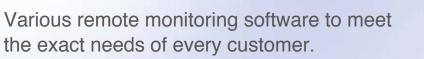
Model		Description		
PFXEXSDVV**	HMI screen edito	HMI screen editor & logic programming software (DVD)		
EX-SED-LICENSE	License	Pro-Server EX Developer License (license key code)		
EX-SRT-LICENSE	License	Pro-Server EX Runtime License (license key code)		
EX-MES-LICENSE-V**	License	License License key permitting Pro-Server EX to access a database (license key code)		

hanged with the version of softwa

Supported Model (Client) *Only model with Ethernet I/F (except GP-4104)	SP5000 SP5000X GP4000 GP3000 LT4000M LT3000 IPC supported WinGP Pro-face IoT Gateway IPC supported WinGP		Old Model with Ethernet I/F	GP2000 Series GLC2000 Series GP77R Series IT2400 Series Factory Gateway
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# **Remote monitoring**

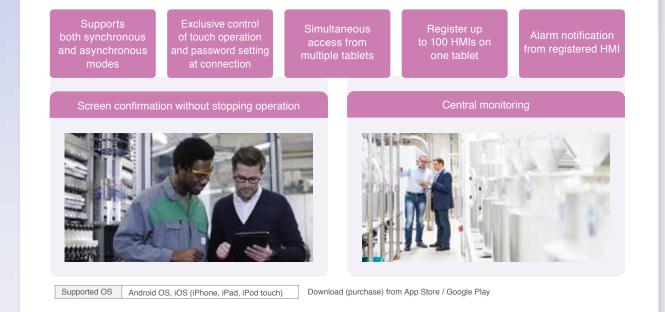


Accurately convey vital information in a timely and effective manner to make your factory a "smart factory". Remote machine monitoring and transfer of work instructions to increase efficiency between the production site and the office.



# Pro-face Remete HMI

Software that enables tablets and smartphones to display and operate the exact same screen as the on-site HMI. Secure design with full-feature functions taking into consideration tablet operations.



# **Pro-face Remote HMI Server**

Installing Pro-face Remote HMI Server on a Windows device allows users to monitor and operate Excel and PDF files from Pro-face Remote HMI, in addition to the terminal operator screens.

Screens available to display on mobile device can be set according to user.

[Full screen] [Application] [Area specification of screens and applications]

Model	Description
PFXEXRHSLS	Software to operate and monitor Windows applications such as Excel or PDF besides Pro-face HMI screen

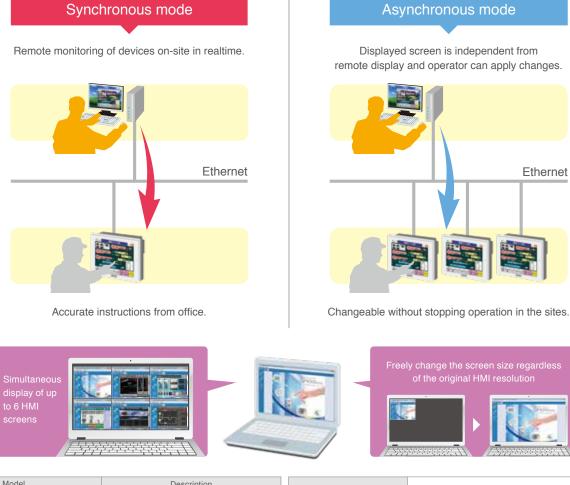


Supported Model (Monitoring)	SP5000 Open Box PS5000 PS4000 PE4000B PC / AT Compatible
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\* WinGP for PC / AT (EX - WINGP - PCAT) is required separately.

# **Pro-face Remote HMI Client for Win**

More powerful Pro-face Remote HMI for Windows OS launched. While inheriting the functions of Pro-face Remote HMI, newly improved functions were added.



Model		Description		Supported Model			
PFXEXRHCLS	1 License	Software for remote viewing of Pro-face HMI from desktop PC (license key code)		(Monitoring) *Only model with Ethernet I/F (except GP-4104)	SP5000 SP5000X GP4000 LT4000M Pro-face IoT Gateway Multi-Converter PS5000* PS4000* PE4000B*		
PFXEXRHCLS10	10 Licenses						
PFXEXRHCLS30	30 Licenses						

\* Pro-face Remote HMI Server is required separately.

Ethernet



Operate and view HMI screens at the production site using personal computers Real-time monitoring without impact on communication traffic.

Supports both synchr and asynchronous m		Simultaneous access to HMI to be monitored from up to three PCs	Simultaneous display of up to 4 HMI screen:		Remote monitoring on 3G/4G lines is also possible thanks to the reduced communication traffic	
Model		Description	Supported Model			
EX-VIEWER-LICENSE	1 License	License allowing a PC to access HMI in remote mode	(Monitoring)	SP5000 SP5000X GP4000 GP3000 LT4000M LT3000 PS5000 PS4000 PE4000B Pro-face IoT Gateway Multi-Converter		
EX-VIEWER-LICENSE-10	10 License		*Only model with Ethernet I/F			
EX-VIEWER-LICENSE-30	30 Licens	es (license key code)	(except GP-4104)			

# Secure Remote Access over Internet

# **Pro-face Connect**

### Connect and Go

Pro-face Connect is a ready-to-use embedded HMI service to access machines remotely and securely.



## **01** Small initial cost

No need to locate VPN router in every branch. Able to operate the system with only the license of running cost.



Able to connect to the existing local IP address

address.

192.168.1.10

**02** Able to use IP address with no change

# with no change. No man-hours to change an IP

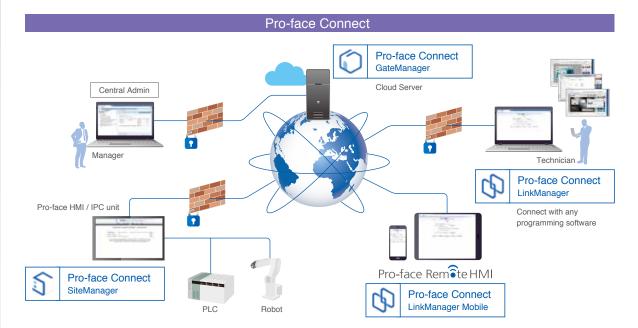
192.168.150.0

**03** Connect securely

Conforms with industry level standards for security. Able to build a secure network.

- User access based on x.509 Cert.
- AES data encryption ISA99 and IEC 62443





#### License Lineup

	Product Name	Model	Description
FREE	FREE TRIAL PACK	PFXCONFREE30	Trial package running 30 days
			1 x GateManager Customer Domain
	Pro-face Connect	PFXCONPACKESS	1 x LinkManager Floating License
	Essential Pack		1 x LinkManager Mobile License
			1 x SiteManager Extended 5 (Annual)
Basic Packs		PFXCONPACKENT	1 x GateManager Customer Domain
Dasic I acks			1 x LinkManager Floating License
	Pro-face Connect Enterprise Pack		1 x LinkManager Mobile License
			20 x SiteManager Extended 5 (Annual)
			1 x GateManager Premium Access
Extended access	SiteManager Embedded extended license PFXCONEXTD5		1 x Pro-face Connect SiteManager Embedded EXTENDED license, 5 device agents
to program other devices	SiteManager Embedded extended license	PFXCONEXT10	1 x Pro-face Connect SiteManager Embedded EXTENDED license, 10 device agents

# **Pro-face Worldwide offices**

