Pro-face[®]

Industrial Personal Computer



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Industrial Personal Computer

PL3000SERIES Industrial Computers with Ultimate Expandability

PS3000 SERIES Industrial Computers Selected for High Usability

FP3000SERIES DVII/F Flat Panel monitors

WinGP Multi-platform Runtime Engine for HMI Software "GP-Pro EX"

and Flat Panel Monitor



"Security" and "Reliability" are designed into Pro-face's high-quality products.

As a leading company in human-machine interface (HMI), Pro-face has produced industrial-use computers that integrate a touch panel monitor in a PC unit, which was offered first in the industry. Since its release, we have maintained the top market share* in Japan as a manufacturer of panel-mounted computers and programmable operator interfaces, also achieving high reputations in many production fields throughout the world.

The HMI products that Pro-face advanced is further enhancing its importance as a key technology in production fields.

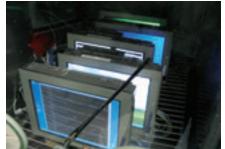
* Excerpt from "2009 Fuji Economic Mechatronics Parts"

Reliable components have been carefully selected to ensure quality.

We conduct strict quality checks in our component selection, evaluation, and verification (e.g. selection of high-temperature resistant components.)

Great emphasis is placed on the quality checking of important components that are of particular concern to customers, such as power supplies and capacitors.

Storage media such as hard disks and CF cards also use only those components that have passed strict evaluation tests. We provide products ensuring quality that cannot be seen simply by comparing catalog specifications.







Storage temperature/humidity cycling test



Vibration resistance test

Long-term stable supply - Windows® XP Professional EOL (License Availability) -

The provision of the Windows[®]XP Professional (hereinafter referred to as XP Professional) Retail Box (package for retail sales) license is discontinued in the end of June 2008. The provision of the DSP version (PC pre-installed package for direct OEMs) license is also discontinued in the end of February 2009. They are currently obtained from retailers and OEMs, yet, they are limited to stock and it is difficult to obtain XP Professional.

However, under Microsofts OEM Customer License Agreement for Embedded Systems, Pro-face can still keep obtaining the DSP version license to embed XP Professional in our products. Therefore, Pro-face guarantees continued supply of products with XP Professional embedded.



Consistent in-house design

We conduct entire in-house product design, from circuit design to BIOS customization. Since all stages from development to customer support are made internally, we can take action to identify and analyze causes of any trouble and take countermeasures by ourselves, even if trouble occurs. This allows customers to use our products securely.



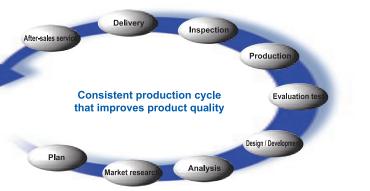
Development / production sites: Izumi Plant (Osaka, Japan)

Pro-face is always seeking out new solutions to meet our customers' future needs.

In the development of industrial computers, Pro-face is always pursuing "Reliability", "Availability" and "Serviceability".

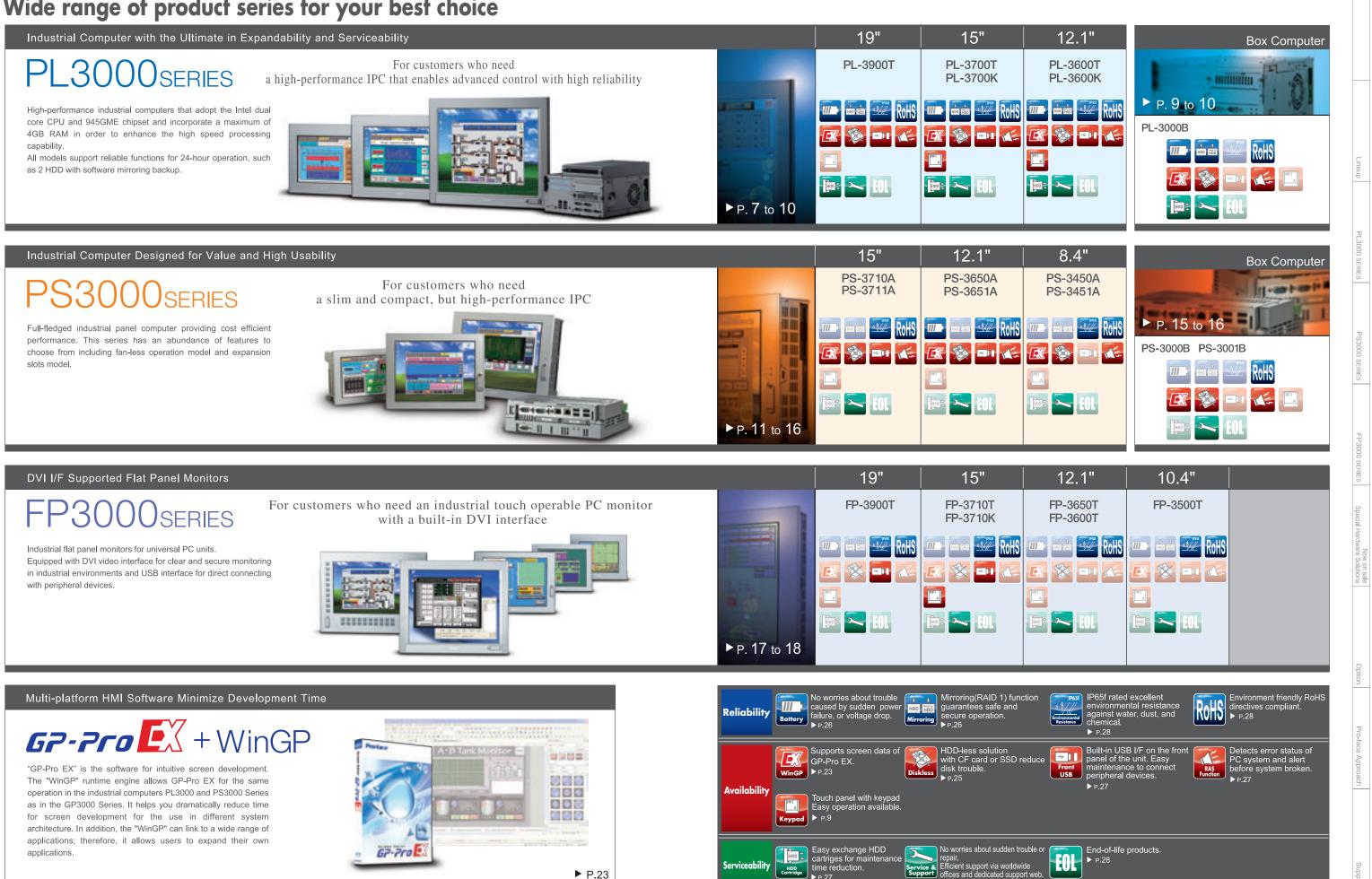
Pro-face always offers leading-edge products, and pursues solutions that allow customers to use our products securely.

Industrial Personal Computer





Wide range of product series for your best choice



Pro-face

PL30

Now on Special

Industrial Personal Computer

Product Lineup

Now on sale Special Hard

		Industrial C	omputer with	n the Ultimat	e in Expand	ability and S	erviceability	Industrial Com for Value and	outer Designed High Usability
			PL3000 SERIES					PS3000) SERIES
		PL-3900T	PL-3700T	PL-3600T	PL-3700K	PL-3600K	PL-3000B	PS-3710A	PS-3711A
				H	Front keypad	Front keypad	Box PC	C	1
			▶P.7			►P.9		▶P.	11
	Screen Size	19 "	15"	12.1"	15"	12.1"		1	5"
	Display Resolution	SXGA (1280 x 1024 pixels)	XGA (1024 x 768 pixels)	SVGA (800 x 600 pixels)	XGA (1024 x 768 pixels)	SVGA (800 x 600 pixels)	VGA (640 x 480 pixels) to UXGA (1600 x 1200 pixels)	(1024 x 7	
	OS		Windows® 2000 Windows® XP Windows® XP				Window Windov Windows®XF	ws◎XP	
	CPU	Core™ Duo 2.0GHz / Celeron® M440 1.86GHz				Pentium [®] M 1.6GHz	ULV Celeron®M 1.0GHz		
	Main Memory	DDR2 512MB to 4GB* *Accessible memory capacity is approx. 3.5GB.				DDR 256MB to 2GB	DDR 256MB to 1GB		
	Chip Set	Intel [®] 945GME Intel [®] 85 + ICH7M ICH					-		
	HDD / SSD	HDD (250GB) / SSD (16GB) <s-ata></s-ata>						60GB) / 16GB) DE>	
	CF Card		1 Slot				1 5	ilot	
	Serial(COM)		4 Ports				4 Ports	2 Ports	
	RAS			1 P	ort			1 F	ort
ຍ	Ethernet (LAN))0BASE-T>)BASE-TX>			1 Port <100 1 Port <100	
Intertac	USB	5 Ports (Front 1, Side 4) 4 Ports				5 P (Front 1, 1	D rts Bottom 4)		
<u>-</u>	PS/2					1 F	ort		
	Optical Drive	DVD-ROM drive / DVD multi drive				DVD-ROM			
	FDD					1 drive			
	PCMCIA							2 S	lots
	Power Supply				to 240V			AC100	
				DC	24V			DC:	24V
	Fanless			_	_				•
	Expansion Slots				s <pci> s <pci></pci></pci>			1 Slot <pci></pci>	

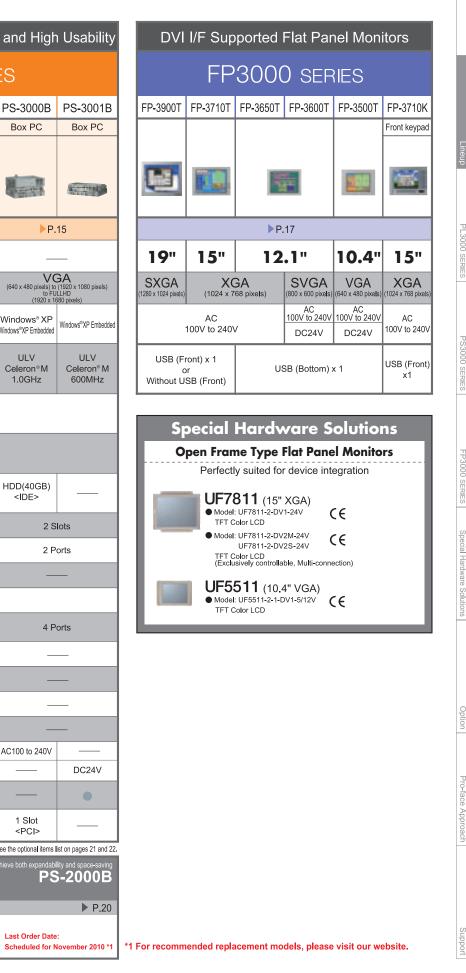
	Industrial Computer Designed for Value and High Usabilit					
		P	S300() serii	ES	
	PS-3650A	PS-3651A	PS-3450A	PS-3451A	PS-3000B	PS-3001E
					Box PC	Box PC
	C				No. of Concession, Name	
	▶P.	13	ÞP	.15	▶P.	15
	12	.1"	8.	4"		
		GA ^{68 pixels})	SV (800 × 60	GA 00 pixe l s)	(640 x 480 pixels) to to FU (1920 x 16	GA (1920 x 1080 pixels) LLHD i80 pixels)
		ws [®] XP [⊃] Embedded	Window Windo Windows® XI		Windows® XP Windows® XP Embedded	Windows®XP Embedd
	Celeron [®] M 1.5GHz	ULV Celeron®M 1.0GHz	ULV Celeron® M 1.0GHz / 600MHz	ULV Celeron [®] M 600MHz	ULV Celeron®M 1.0GHz	ULV Celeron® M 600MHz
			DI 256MB	DR to 1GB		
				55GME + H4		
		250GB) ATA>	HDD(4 <id< td=""><td>40GB) ⊧E></td><td>HDD(40GB) <ide></ide></td><td></td></id<>	40GB) ⊧E>	HDD(40GB) <ide></ide>	
	1 5	Slot	2 S	lots	2 S	lots
	1 Port o	r 2 Ports	2 Ports		2 Ports	
	1 P	ort* e serial 2 model				
				00BASE-T> 0BASE-TX>		
		orts , Side 4)	4 Po (Botto	orts	4 P	orts
	_					
	1 5	Slot		_		
		AC100 to 240V			AC100 to 240V	
		DC	24V			DC24V
		•		•		•
	1 Slot <pci></pci>		1 Slot <pci></pci>		1 Slot <pci></pci>	
_			Built-in Option or Access			
	vvindov	vs- CES.0 built-in	panel computer	Built-in computer to a	achieve both expandabi	ity and space-savin



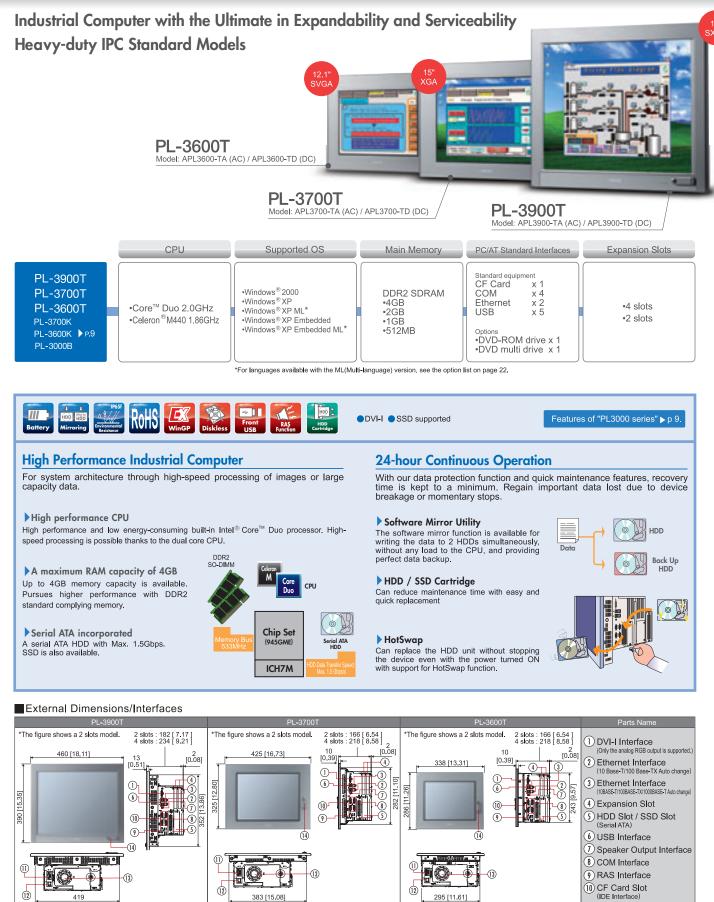


Ath maximum 3 slots expansion available using fanless slots PL-5910T / 5911T P.19 Last Order Date: Scheduled for November 2010 *1 Windows[®] CE5.0 built-in panel computer PS-3600G PP.20 P.20 P.20 Built-in computer to achieve both expandability and space-saving PS-2000B P.20 Last Order Date: Scheduled for November 2010 *1

Industrial Personal Computer



PL3000series



Panel Cut-Out Dimension

/ r ≤ 3[0.12]

383.5⁺¹ [15.10^{+0.04}]

Allowable Panel Thickness: 1.6 to 10.0

			Industri	al Comp		
P	erformance Speci	fications				
	Model	APL3900-TA	APL3900-TD	APL37		
	Display Type					
	Display Size	1:	9"			
	Display Colors					
	Graphics	SXGA (1280	SXGA (1280 x 1024 pixels)			
	Backlight	CCFL (User non-replaceable parts, return system to distributor)				
	Effective Display Area	W376.32 x H301.056mn	n [W14.82 x H11.85in.]	W306.2		
	Brightness Control			4 le		
	Supported OS		,	Windows® 200		
	CPU			Intel [®] Core ¹		
	L2 Cache Memory		Intel [®] Core [™]	Duo 2.0GHz 2I		
	Main Memory		DDR2 S	SDRAM (PC42)		
	Chipset					
	Graphic Accelerator					
	Video Memory			64MB r		
	BIOS					
	Touch Panel Type					
1	Fouch Panel Resolution					
	Serial ATA			Seria		
	IDE		CF	Card Slot (Typ		
	Serial (COM1)		RS-232C (RS-			
	Serial (COM2)		RS-	232C (RI / +5)		
	Serial (COM3)			RS-232		
Ŋ	Serial (COM4)			RS-232		
וונפוומרפ	Ethernet (LAN1)		10BASE-T / 100BA	SE-TX / 1000E		
	Ethernet (LAN2)		10BASE-T	/ 100BASE-TX		
	USB	USB2.0 Connector	: Type A x 5 (Front x 1, Side			
	RAS		set input): 2 points, Output: 2 po			
	Sound			SPEAKER		
	Video			DVI-I Outp		
	DVD Drive			DVD-RO		
٩va	ailable memory capacity is app	rox. 3.5GB. *2 Cannot be used v	vhen a battery unit is installed. *	3 Only the analo		
G	eneral Specification	ons				
	Model	APL3900-TA	APL3900-TD	APL37		
nte	rnational Safety Standards					
Сс	omforming to Standards ^{*8}		UL508, CSA-C22.2 No.14 EN55011 Class A,			
	Input Voltage	AC100 to 240V	DC24V	AC100		
	Rated Voltage Range	AC85 to 264V	DC19.2 to 28.8V	AC85 t		

APL3600-TA SI/ISA-12.12.01-2007^{*9}, CSA-C22.2 No.213-M1987 (c-UL Approval)^{*} , EN60950-1 (AC models only), 47 CFR Part 15 Class A, KCC*1 AC100 to 240V) to 240V DC24V DC24V DC19.2 to 28.8\ AC85 to 264V DC19.2 to 28.8V to 264V Rated Frequency 50 / 60Hz 50 / 60Hz 50 / 60Hz Power Supply Shorter than 1 cycle Note that pause occurrences mu be more than 1 second apart rter than 1 cycle Shorter than 1 cycle Allowable Voltage Drop 5ms (max.) 5ms (max.) 5ms (max.) ote that pause occ Power Consumption 145\/A (max) 145W (max) 145VA (max) 145W (max) 145VA (max) 145W (max) AC1000V 20mA for 1 minute AC1500V 20mA for 1 minute AC1500V 20mA for 1 minute AC1000V 20mA for 1 minute AC1500V 20mA for 1 minute AC1000V 20mA for 1 minute Voltage Endurance Insulation Resistance DC 500V 10MΩ (min.) (between charging and FG terminals) pient Operating Temperatu <During DVD writing, when a battery unit^{*5} is installed> 5°C to 45°C <Without HDD> 0 to 50°C Storage Temperature -20 to +60°C Ambient Humidity 10 to 90%RH (not Condensing, Wet bulb temperature: <With HDD / DVD> 29°C max., <Without HDD / DVD> 39°C max.) 10 to 90%RH (not Condensing.Wet bulb temperature : 39°C max.) Storage Humidity For use in Pollution Degree 2 environment max. Pollution Degree Atmosphere Free of corrosive gases ssure Vibration Resistance (Altitude Rar 800 to 1114hPa (2000m max.) <With HDD> 10 to 57Hz Single amplitude: 0.075mm[0.003in] 57 to 150Hz Fixed acceleration: 9.8m/s², X, Y, Z directions 10 cycles (for 80 minutes) «Without HDD (SSD or CF card)> IEC 61131-2 compliant 5 to 9Hz Single amplitude: 3.5mm, [0.14in] 9 to 150Hz Fixed acceleration: 9.8m/s², X, Y, Z directions 10 cycles (for 100 minutes) Vibration Resistance Noise Voltage: 1500Vp-p, Pulse width: 50ns, 500ns, 1µs, Rise Time: 1ns (via noise simulato Noise Immunity Contact Discharge Method: 6kV (IEC 61000-4-2 Level 3) lectrostatic Discharge Immuni <AC model> Protective grounding: D type (Same for FG and SG terminals) <DC model> Functional grounding: D type (Same for FG and SG terminals) Grounding Equivalent IP65f NEMA#250 TYPE4X / 12 (When embedding the panel and not using the front panel USB port)* Structure 2 slots: W460 x H390 x D182mm [W18.11 x H15.35 x D7.17in.] 2 slots: W425 x H325 x D166mm [W16.73 x H12.80 x D6.54in.] 2 slots: W338 x H286 x D166mm [W13.31 x H11.26 x D6.54in.] 4 slots: W460 x H390 x D234mm [W18.11 x H15.35 x D9.21in.] 4 slots: W425 x H325 x D218mm [W16.73 x H12.80 x D8.58in.] 4 slots: W338 x H286 x D218mm [W13.31 x H11.26 x D8.58in.] External Dimensions 2 slots: 12.0kg [26.4lb] max. (Main unit only) 2 slots: 14.0kg [30.8lb] max, (Main unit only) 2 slots: 8.0kg [17.6lb] max. (Main unit only Weight 4 slots: 15.0kg [33.0lb] max. (Main unit only) 4 slots: 13.0kg [28.6lb] max. (Main unit only) 4 slots: 9.0kg [19.8lb] max. (Main unit only

Cooling Method 4 A UL approval number is different from a normal approval number when a battery unit is installed, or a battery unit and a DVD drive unit are installed. For details, see the manual

*5 A battery unit can be installed only in the AC power supply 4-slot model. *6 The maximum vibration characteristic value during DVD drive operation is 1.96m/s². When using panel cutout conversion installation fasteners, the half amplitude is 0.0375mm with HDD and the constant acceleration is 4.9m/s². *7 Meets applicable testing requirements. Operation is not, however, guaranteed in every environment. *8 Note that the built-in battery unit type has different compliance standards.

*9 Suitable for use in Class I, Division 2, Groups A, B, C, and D Hazardous Locations only. *10 AC models only.

Power Connector

14) Front USB Interface

2 Power Switch 3 Cooling Fan

Panel Cut-Out Dimension

/ r ≤ 3[0.12]

295.5⁺¹ [11.63^{+0.04}]

Units: mm[in.]

Allowable Panel Thickness: 1.6 to 10.0

Units: mm[in.]

Item	2 slot	4 slot	Board size	
1st slot	PCI Rev.2.3 (5V)	PCI Rev.2.3 (5V)	180 x 106.68mm [7.09 x 4.20in.]	
2nd slot	PCI Rev.2.3 (5V)	PCI Rev.2.3 (5V)	180 x 106.68mm [7.09 x 4.20in.]	
3rd slot		PCI Rev.2.3 (5V)	255 x 106.68mm [10.04 x 4.20in.]	
4th slot		PCI Rev.2.3 (5V)	255 x 106.68mm [10.04 x 4.20in.]	
Power Supply*8	DC5V: 2.0A, DC12V: 1.0A, DC-12V: 0.1A, DC3.3V: 1.0A	DC5V: 4.0A, DC12V: 1.0A, DC-12V: 0.1A, DC3.3V: 2.0A		
8 Maximum power supply is 35W for PL-3000T and 40W for other models				

icate Download Service nternational Safety Standards and the guarantee of the compatibility for EU RoHS directives

Easily find individual product certifications and quickly obtain the necessary documentation for custo

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

Panel Cut-Out Dimensio

r ≤ 3[0.12]

419.5⁺¹ [16.52^{+0.04}]

Allowable Panel Thickness: 1.6 to 10.0

Units: mm[in.]

puter with the Ultimate in Expandability and Serviceability

3700-TA APL3700-TD	APL3600-TA APL3600-TD				
TFT Color LCD					
15"	12.1"				
262,144 colors					
XGA (1024 x 768 pixels)	SVGA (800 x 600 pixels)				
	eplaceable)				
.2 x H230.1mm [W12.06 x H9.06in.]	W248.0 x H186.5mm [W9.76 x H7.34in.]				
levels (adjusted with the software)					
00 / Windows® XP / Windows® XP Embedded	d				
e™ Duo 2.0GHz / Celeron [®] M440 1.86GHz					
2MB / Intel [®] Celeron [®] M440 1.86GHz 1MB(built in the CPU)					
200) 512MB / 1GB / 2GB / 4G ^{*1} (SO-DIMM x :	2 slots)				
Intel [®] 945GME + ICH7M					
Built in Intel® 945GME					
max.(when using windows®)UMA type					
Phoenix [®] TrustedCore [™] BIOS					
Resistive Film (Analog)					
1024 x 1024					
ATA Rev.1.0a x 2 HDD or SSD					
/pe I / II) x 1(Master) DVD Drive x 1(Sla	ave)				
485, RI / + 5V switchable) Connector: D-	1 0				
5V switchable) Connector: D-Sub 9-pin Pl	lug ^{*2}				
32C Connector: D-Sub 9-pin Plug					
32C Connector: D-Sub 9-pin Plug					
BASE-T Auto change Connector: Modula	ar Jack (RJ-45) x 1				
X Auto change Connector: Modular Jack	(RJ-45) x 1				
er Voltage: DC5V±5%, Output Current: 500m	A (max.), Maximum Communication Distance: 5m				
age: DC12V Maximum Rated Current: 100mA Input Voltage: DC12 to 24V Connector: D-Sub 9-pin Socket x 1					
R OUTPUT Connector: MINI-JACK¢3.5 x 1					
put ^{*3} Connector: DVI-I 29-pin Socket x 1					
ROM Drive / DVD multi drive (Optional)					
og RGB output is supported.					

Forced Air Cooling by the CPU fan



Industrial Computer with the Ultimate in Expandability and Serviceability Heavy-duty IPC with Front Keypads & Box Models

PL-3600K Model: APL3700-KA (AC) / APL3700-KD (DC) Model: APL3700-KA (AC) / APL3700-KD (DC)

	CPU	Supported OS	Main Memory	PC/AT Standard Interfaces	Expansion Slots
PL-3700K PL-3600K PL-3000B PL-3900T PL-3700T ▶ _{P.7} PL-3600T	•Core [™] Duo 2.0GHz •Celeron [®] M440 1.86GHz	-Windows [®] 2000 -Windows [®] 2000 ML* (for PL3000-8 with Celeron" with M440 only) -Windows [®] XP -Windows [®] XP ML* -Windows [®] XP Embedded -Windows [®] XP Embedded ML*	DDR2 SDRAM •4GB •2GB •1GB •512MB	Standard equipment CF Card x 1 COM x 4 Ethernet x 2 USB x 5 (4 for PL-3000B) Options • DVD-ROM drive x 1 • DVD multi drive x 1	•4 slots •2 slots

 $^{*}\mbox{For languages}$ available with the ML(Multi-language) version, see the option list on page 22.

Optional battery unit ▶ P.26

Designed on a common platform

nizes evaluation work

space is needed.

Enables secure operations, even with a sudden power failure. The battery unit can prevent trouble that may arise during a power failure or an unstable voltage situation. The attachable unit is built into the body of PC. No additional

When a customer needs different models, the common hardware platform can

Features of "PL3000 series" ▶ p 7

Image: Second second

Single unit integrating front keypads, mouse, and display with an industrial PC. Membrane keypad on the front panel secures data input in harsh industrial environments.

·Cusutomizable special function keys. ·Built-in Front USB port.



External Dimensions/Interfaces

The figure shows a 2 slots mode 2 slots: 166 [6.54] The figure shows a 2 slots model 2 slost: 166 [6.54] 4 slots: 218 [8.58] The figure shows a 2 slots model 243 [9.57] 4 slots: 218 [8.58 243 [9.57] 289 [11.38] 277 [10.91] 3258 i i $\hat{\Pi}$ Units: mm[in. 111111111111 *The figure shows a 4 slots model. 243 [9.57] 289 [11.38] 243 [9.57] 277 [10.91] 32855 441 [17.36 Units: mm[in.] 8 COM Interface DVI-I Interface Panel Cut-Out Dimension Panel Cut-Out Dimensions (Only the analog RGB output is su d for models other than PL3000B [°] RAS Interface 2) Ethernet Interface (10 Base-T/100 Base-TX Auto c 0 CF Card Slot (IDE Interface)) Power Connector (European Terminal) Ethernet Interface BASE-T/100BASE-TX/1000BASE-TAU) Power Switch r ≤ 3[0.12] / r ≤ 3[0.12] Expansion Slot (13) Cooling Fan) HDD / SSD Slot(Serial ATA) (14) Front USB Interface 383.5^{+1}_{-0} [15.10^{+0.04}] 441.5⁺¹ [17.38^{+0.04}] USB Interface Allowable Panel Thickness: 1.6 to 10.0 (15) Battery Unit (Optional) Allowable Panel Thickness: 1.6 to 10.0 Units: mm[in.] Units: mm[in.] Speaker Output Interface

Industrial Computer with the Ultimate in Expandability and Serviceability

Р	erformance Speci	fications		
	Model	APL3700-KA	APL3700-KD	APL3600
	Display Type		TFT Co	lor LCD
	Display Size	15		
Display Colors			262,14	4 colors
	Graphics	XGA (1024 x	768 pixels)	:
	Backlight		CCFL (Re	placeable)
	Effective Display Area	W306.2 x H230.1mm	[W12.06 x H9.06in.]	W248.0
	Brightness Control		4 levels (adjusted	with the software
	Supported OS			Windows [©] 2000 /
	CPU			Intel [®] Core™E
	L2 Cache Memory		Intel [®] Core™	Duo 2.0GHz 2MB
	Main Memory		DDR2 S	DRAM (PC4200)
	Chipset			
	Graphic Accelerator			
	Video Memory			64MB max
	BIOS			Ph
	Touch Panel Type		Resistive F	ilm (Analog)
٦	Fouch Panel Resolution		1024 >	(1024
	No. of Key Switches	74		
	Key Switch Type	Membrane Switch		
	Serial ATA	Serial AT		
	IDE	CF Card Slot (Type		
	Serial (COM1)	RS-232C (RS-232C / 422 / 485		
	Serial (COM2)	RS-232C (RI / + 5V s		
	Serial (COM3)			RS-232C
۵	Serial (COM4)			RS-232C
Interface	Ethernet (LAN1)	10BASE-T / 100BASE-TX / 100		
Ethernet (LAN2)			10BASE-T / 100BASE-T	
-	USB		nnector: Type A x 5 (Front x Current: 500mA (max.), Max	
	RAS	Input (usable as an external res	et input): 2 points, Output:2 po	ints, Rated Voltage
	Sound			SPEAKER OL
	Video			DVI-I Output
	DVD Drive			DVD-ROM

*1 Available memory capacity is approx. 3.5GB. *2 Cannot be used when a battery unit is installed. *3 Only the analog RGB output is supported in other models than PL-3000B.

General Specifications

Borformonoo Spooification

	Model	APL3700-KA	APL3700-KD	APL3600		
International Safety Standards				\$∰•C€		
Comfor	ming to Standards ^{*8}	UL508, CSA-C22.2, No	o.142-M1987, ANSI/ISA-12.12.0 EN55011 Class A, EN61000-6-			
	Rated Voltage	AC100 to 240V	DC24V	AC100 to		
	Rated Voltage Range	AC85 to 264V	DC19.2 to 28.8V	AC85 to		
Power	Rated Frequency	50 / 60Hz		50 / 60		
Supply	Allowable Voltage Drop	Shorter than 1 cycle (Note that pause occurrences must be more than 1 second apart)	5ms (max.)	Shorter than Note that pause occ be more than 1 se		
	Power Consumption	145VA (max.)	145W (max.)	145VA (r		
Vol	ltage Endurance	AC1500V 20mA for 1 minute (between charging and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)	AC1500V 20mA (between charging an		
Insu	lation Resistance	DC500V 10MQ(
Ambient (Operating Temperature	<during a="" battery="" dvd="" unit<sup="" when="" writing,="">*5 is installed> 5 to 45°C</during>				
Stor	age Temperature					
Ar	mbient Humidity	10 to 90%RH (not Condensing, Wet bulb				
	orage Humidity	10 to 90%RH (not Co				
P	ollution Degree	For use in F				
	Atmosphere					
ir Pressure Vil	pration Resistance (Altitude Range)	80				
Vibra	ation Resistance ^{*6}	<with hdd=""> 10 to 57Hz Single Amplitude: 0.075mm[0.003 <without (ssd="" card)="" cf="" hdd="" or=""> IEC 61131-2 compliant 5 to 9Hz Single amplitude: 0.075mm[0.003]</without></with>				
Ν	loise Immunity	1500Vp-p, Pulse width: 50				
Electrosta	atic Discharge Immunity	Contact Discha				
Grounding		<ac model=""> Protective <dc model=""> Functiona</dc></ac>				
Structure		Equivalent IP65f NEMA#250 TYPE4X / 12 (When embedding the panel				
Exte	ernal Dimensions	2 slots: W488 x H367 x D166mm [W19.21 x H14.45 x D6.54in.] 2 slots: W425 x I 4 slots: W488 x H367 x D218mm [W19.21 x H14.45 x D8.58in.] 4 slots: W425 x I				
Weight		2 slots: 13.0kg [28.6lb] max. (Main unit only) 2 slots: 4 slots: 14.0kg [30.8lb] max. (Main unit only) 4 slots:				
C	cooling Method			Force		
4 A UL ani	oroval number is different	from a normal approval number	when a battery unit is installed, o			

*4 A UL approval number is different from a normal approval number when a battery unit is installed, or a battery unit and a DVD drive unit are installed. For details, see the manual. *5 A battery unit can be installed only in the AC power supply 4-slot model. *6 The maximum vibration characteristic value during DVD drive operation is 1.96m/s' *7 Meets applicable testing requirements. Operation is not, however, guaranteed in every environment. *8 Note that the built-in battery unit type has different compliance standards. *9 Suitable for use in Class I, Division 2, Groups A, B, C, and D Hazardous Locations only. *10 AC models only.

Certificate Download Service

Easily find individual product certifications and quickly obtain the necessary documentation for custor safety inspections, and insurance.

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

|||

sale Hard

> Now on Special

00 - KA	APL3600-KD	APL3000-BA		APL3000-BD
12.	1"			
SVGA (800 x	600 pixels)	VGA (640 x 480 pixe	ls) to UXGA	(1600 x 1200 pixels)
	[W9.76 x H7.34in.]			
ire)				
	P / Windows® XP Embedded	d		
	Celeron® M440 1.86GHz			
	on [®] M440 1.86GHz 1MB (bui	/		
,	B / 2GB / 4GB (SO-DIMM x 2	2 slots) ^{*1}		
Intel [®] 945GN				
Built in Intel				
	g windows [®])UMA type			
Phoenix® Truste	dCore™ BIOS	1		
ATA Rev.1.0a>				
pe I / II) x 1 (Ma				
35, RI/+5V sw				
' switchable)	Connector: D-Sub 9-pin P	lug ²		
	tor: D-Sub 9-pin Plug			
	tor: D-Sub 9-pin Plug			
	change Connecter: Modular			
	Connector: Modular Jack (F	,		
wer Voltage: D				ower Voltage: DC5V ±5%, mmunication Distance: 5m
ge: DC12V Maxi	mum Rated Current: 100mA	nput Voltage: DC12 to 24	V Connecter	: D-Sub 9-pin socket x 1
	ector: MINI-JACK∳3.5 x 1			
ut Connector: [DVI-I 29-pin Socket ^{*3} x 1			

M Drive / DVD multi drive (Optional)

00-KA	APL3600-KD	APL3000-BA	APL3000-BD	
			· C E 🥔 10	
22.2 No.213-M C models only)	1987(c-UL Approva l)^{*9},	CSA-C22.2 No.213-M EN55011 Class A, EN61000-6-	987, ANSI/ISA-12.12.01-2007 ^{*9} , 1987(c-UL Approval) ^{*9} , 2, EN60950-1(AC models only), Class A, KCC ^{*10}	
o 240V	DC24V	AC100 to 240V	DC24V	
264V	DC19.2 to 28.8V	AC85 to 264V	DC19.2 to 28.8V	
i0Hz		50 / 60Hz		
an 1 cycle ccurrences must second apart)	5ms (max.)	Shorter than 1 cycle (Note that pause occurrences must be more than 1 second apart)	5ms (max.)	
(max.)	145W (max.)	2 slots: 120VA (max.) 4 slots: 145VA (max.)	2 slots: 120W (max.) 4 slots: 145W (max.)	
A for 1 minute and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)	AC1500V 20mA for 1 minute (between charging and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)	
(min.) (betwee	en charging and FG terminals)		
C <during d<="" td=""><td>VD reading, when HDD is ins</td><td>talled> 5 to 50°C <with< td=""><td>out HDD> 0 to 50°C</td></with<></td></during>	VD reading, when HDD is ins	talled> 5 to 50°C <with< td=""><td>out HDD> 0 to 50°C</td></with<>	out HDD> 0 to 50°C	
-20 to +	-60°C			
b temperature	: <with hdd=""> 29°C max., <w< td=""><td>/ithout HDD> 39°C max.)</td><td></td></w<></with>	/ithout HDD> 39°C max.)		
ondensation,	Vet bulb temperature : 39°C r	nax.)		
	ree 2 environment max.			
Free of corr				
00 to 1114hPa	a (2000m max.)			
3in] 57 to 150H plitude: 3.5mm,	z Fixed acceleration: 9.8m/s ² , X [0.14in] 9 to 150Hz Fixed accel	, Y, Z directions 10 cycles (for 80 eration: 9.8m/s ² , X, Y, Z direction) minutes) ns 10 cycles (for 100 minutes)	
0ns, 500ns, 1	s, Rise Time: 1ns (via noise	simulator)		
arge Method:	6kV (IEC 61000-4-2 Level 3)			
ve grounding: D nal grounding: D	type (Same for FG and SG tern type (Same for FG and SG tern	ninals) ninals)		
and not using the front panel USB port.)				
H325 x D166mm [W16.73 x H12.80 x D6.54in.] H325 x D218mm [W16.73 x H12.80 x D6.54in.] 4 slots: W243 x H176.5 x D277mm [W9.57 x H6.95 x D10.91in.]				
1.0kg [24.2lb] max. (Main unit only) 2 slots: 6.0kg [13.2lb] max. (Main unit only) 2.0kg [26.4lb] max. (Main unit only) 4 slots: 7.5kg [16.5lb] max. (Main unit only)				
ed Air Cooling	by the CPU fan*7			

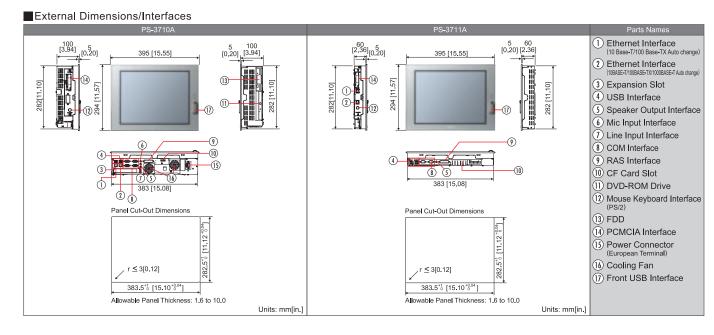
4 slot	Board size
PCI Rev.2.3 (5V)	180 x 106.68mm [7.09 x 4.20in.]
PCI Rev.2.3 (5V)	180 x 106.68mm [7.09 x 4.20in.]
PCI Rev.2.3 (5V)	255 x 106.68mm [10.04 x 4.20in.]
PCI Rev.2.3 (5V)	255 x 106.68mm [10.04 x 4.20in.]
DC5V: 4.0A, DC12V: 1.0A, DC-12V: 0.1A, DC3.3V: 2.0A	



Now on sale are Solutions

PS3000series





Ethernet (LA Ethernet (LA Ethernet (LA USB Keyboard RAS Sound FD Drive DVD Driv PCMCIA Comforming to Star Comforming to Star Comforming to Star Rated Voltag Rated Rated Rotag Rated Rated Rated Voltag Rated Rated Rated R	olay Size ay Colors raphics acklight ot Pitch Display Area eess Control oorted OS CPU		PS3710A-T42-24V	PS3711A-T42	PS3711A-T42-24V				
Display Size Display Colors Graphics Graphics Backlight Dot Pitch Effective Display / Brightness Colors CPU L2 Cache Memory L2 Cache Memory ChipSet Graphic Accelera Video Memory BIOS Touch Panel Resol BIOS Touch Panel Resol Serial (CON Serial (CO	olay Size ay Colors raphics acklight ot Pitch Display Area eess Control oorted OS CPU		TFT Cc	olor LCD					
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Backlight Dot Pitch Effective Display/ Effective Display/ Brightness Cont Supported OS CPU L2 Cache Memory ChipSet Graphic Accelera BIOS Touch Panel Resol IDE Serial (CON Serial (SERial (CON Serial (CON Serial (SERial (SER	acklight ot Pitch Display Area ess Control ported OS CPU		XGA (1,024						
Dot Pitch Effective Display / Brightness Cont Supported OS CPU L2 Cache Memory L2 Cache Memory L2 Cache Memory Utic Craphic Accelera Video Memory BIOS Touch Panel Resol Serial (CON Ethernet (LA Serial (CON FD Drive USB Keyboard RAS Sound FD Drive DVD Driv PCMCIA Comforming to Star Rated Vid Rated Voltag Rated Pre Allowable Vol Power Cons Voltage Endurar Insulation Resistan bient Operating Tempra Ambient Humidi Storage Tempera Atmosphere ressure Vibration Resistance (/ Vibration Resistance // Noise Immunit ctrostatic Discharge Grounding	ot Pitch Display Area ess Control ported OS CPU	CCFL (Replaceable)							
Effective Display / Brightness Cont Supported OS CPU L2 Cache Memory BIOS Touch Panel Ty Touch Panel Resol Serial (CON Serial CON Serial (CON Serial CON Serial (CON Serial CON Serial (CON Serial CON Serial C	Display Area less Control ported OS CPU	0.297[0.01] x 0.297mm[0.01in.]							
Brightness Cont Supported OS CPU L2 Cache Memory Main Memory ChipSet Graphic Accelera Video Memory BIOS Touch Panel Ty Touch Panel Resol Serial (CON Serial (CON	ess Control ported OS CPU	W304.1 x H228.1mm [M11.97 x H8.98in.]							
Supported OS CPU L2 Cache Memory ChipSet Graphic Accelera Video Memory BIOS Touch Panel Ty Touch Panel Ty Touch Panel Ty Touch Panel Ty Couch Panel Ty IDE Serial (CON Serial	oorted OS CPU	4 levels (adjusted with the software)							
CPU L2 Cache Memory ChipSet Graphic Accelere Video Memory BIOS Touch Panel Tay Touch Panel Resol Serial (CON Construction RAS Sound FD Drive USB Keyboard RAS Sound FD Drive DVD Driv PCMCIA an be switched betwee General Spec Model ternational Safety St Comforming to Star Rated Voltag Rated Pre Allowable Vol Power Com Voltage Endurar Insulation Resista bient Operating Tempera Atmosphere ressure Vibration Resista Noise Immunit ctrostatic Discharge Grounding	CPU		· ·						
L2 Cache Memory Main Memory ChipSet Graphic Accelere Video Memory BIOS Touch Panel Ty Touch Panel Resol Serial (CON Serial (CO				KP / Windows® XP Embedded					
Main Memory ChipSet Graphic Accelera Video Memory BIOS Touch Panel Tyy Touch Panel Resol Serial (CON S	he Memory	Intel [®] Pentiu		Intel® ULV Cele					
ChipSet Graphic Accelera Video Memory BIOS Touch Panel Ty Touch Panel Resol IDE Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial CON Serial CON Rated Voltage Rated Via Rated Via R		1MB (Built i	n the CPU)	512KB (Built	t in the CPU)				
ChipSet Graphic Accelera Video Memory BIOS Touch Panel Ty Touch Panel Resol IDE Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial CON Serial CON Rated Voltage Rated Via Rated Via R	Momon	DDR SDRA		DDR SDRA					
Graphic Accelera Video Memory BIOS Touch Panel Ty Touch Panel Ty Touch Panel Ty Touch Panel Ty Touch Panel Teso IDE Serial (CON Serial (CON Serial (CON Serial (CON Ethernet (LA Ethernet (rivieniory	256MB / 512MB / 1GB / 2	2GB (SO-DIMM x 2 slots)	256MB / 512MB / 1G	B (SO-DIMM x 1 slot)				
Video Memory BIOS Touch Panel Ty Jouch Panel Resol IDE Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Ethernet (LA Ethernet	hipSet		Intel® 855G	SME + ICH4					
BIOS Touch Panel Ty Touch Panel Ty Touch Panel Resol IDE Serial (CON Serial (C	Accelerator		Built in Inte	el® 855GME					
Touch Panel Ty Touch Panel Ty Touch Panel Resol Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Ethernet (LA E	o Memory		64MB max.(when usin	ng windows®)UMA type					
Touch Panel Ty Touch Panel Ty Touch Panel Resol Serial (CON Serial (CON Serial (CON Serial (CON Serial (CON Ethernet (LA E	BIOS			OS Embedded Pro					
Touch Panel Resol IDE IDE Serial (CON Serial (CON Serial (CON Serial (CON Ethernet (LA Ethernet(ilm (analog)					
IDE Serial (CON Ethernet (LA Et				x 1024					
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Serial (CON Serial (CON Serial (CON Serial (CON Ethernet (LA Ethernet (LA Ethernet (LA USB Keyboard RAS Sound FD Drive DVD Driv PCMCIA Comforming to Star Comforming to Star Comforming to Star Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Const Voltage Endurar Insulation Resista mbient Operating Temps Storage Tempera Ambient Humid Storage Humidi Pollution Degree Atmosphere ressure Vibration Resista Noise Immunit Crostatic Discharge Grounding	IDE		secondary master)	CF card slot (Typ	eII) x 1 (slave) *2				
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Ethernet (LA USB Keyboard RAS Sound FD Drive DVD Driv PCMCIA Comforming to Star Comforming to Star Comforming to Star Rated Voltag Rated Voltag Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Atmosphere ressure Vibration Resista Noise Immunit ctrostatic Discharge	erial (COM4)	Connector: D-							
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Keyboard Keyboard Keyboard RAS Sound FD Drive DVD Driv PCMCIA FD Drive DVD Driv PCMCIA FD Drive OVD Driv PCMCIA FD Drive Comforming to Star Rated Vi Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltage Endurar Insulation Resista bient Operating Tempera Ambient Humid Storage Tempera Ambient Hu			Output Current: 500mA (max.), Max	kimum Communication Distance: 5m					
Sound FD Drive DVD Driv PCMCIA an be switched betwee General Spect Model ternational Safety SI Comforming to Star Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Cons Voltage Endurar Insulation Resista Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Atmosphere ressure Vibration Resista Noise Immunit ctrostatic Discharge Grounding	Keyboard		PS/2, Connecte	r: Mini-DIN 6 pin					
Sound FD Drive DVD Driv PCMCIA an be switched betwee General Spect Model ternational Safety SI Comforming to Star Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Cons Voltage Endurar Insulation Resista Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Atmosphere ressure Vibration Resista Noise Immunit ctrostatic Discharge Grounding			Input: 4 points Output: 4 pr	oints Rated Voltage: DC24V					
Sound FD Drive DVD Driv PCMCIA an be switched betwee General Spect Model ternational Safety SI Comforming to Star Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Cons Voltage Endurar Insulation Resista Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Atmosphere ressure Vibration Resista Noise Immunit ctrostatic Discharge Grounding				Current: 100mA					
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FD Drive DVD Driv PCMCIA an be switched betwee General Spect Model ternational Safety SI Comforming to Star Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Cons Voltage Endurar Insulation Resista mbient Operating Temp Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Atmosphere ressure Vibration Resistance (/ Vibration Resista			Connector: D-Su	ıb 25-pin plug x 1					
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DVD Driv PCMCIA can be switched betwee General Spect Model ternational Safety St Comforming to Star Rated Volta Rated Volta Rated Volta Rated Volta Power Com Voltage Endurar Insulation Resista bient Operating Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Tempera Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding		SPEAKER OUT, LINE IN, MIC IN	•	SPEAKER OUT Connec	SUL WIINFJAURØS S X 1				
PCMCIA Composition of the service of		2-mode 3.5" flop							
an be switched betwee General Spec Model ternational Safety SI Comforming to Star Comforming to Star Rated Voltag Rated Voltag Rated Voltage Power Cons Voltage Endurar Insulation Resista mbient Operating Temp Storage Humidi Pollution Degree Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding		DVD-ROM		d SOUND functions excluded) Connector: T					
Comforming to Star Rated V(Rated Volta) Rated Volta Rated Volta Rated Volta Power Const Voltage Endurar Insulation Resista Noise Inmunit Storage Tempera Ambient Humid Storage Humidi Pollution Degree Atmosphere ressue Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding	Model	PS3710A-T42	PS3710A-T42-24V	PS3711A-T42	PS3711A-T42-24V				
A Rated Vi Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Com Voltage Endurar Insulation Resista bient Operating Temp Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista	Safety Standards)، (الله	🖲 CE 🌈 7					
A Rated Vi Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Com Voltage Endurar Insulation Resista bient Operating Temp Storage Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista		111 500, 000, 00		втер 12.12.01-2007 ^{*6} . CSA-C22.2 No.213-M1987 (с-U	L Annual *10				
Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Cons Voltage Endurar Insulation Resista mbient Operating Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Noise Immunit ctrostatic Discharge Grounding	ng to Standards		EN55011 Class A, EN61000-6-2, EN60950-1 (A		c, pp. over, ,				
Rated Voltag Rated Voltag Rated Fre Allowable Vol Power Cons Voltage Endurar Insulation Resista mbient Operating Tempera Ambient Humidi Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Noise Immunit ctrostatic Discharge Grounding	Rated Valtage	AC100 to 240V	DC24V	AC100 to 240V	DC24V				
wer Rated Fre Allowable Vol Power Cons Voltage Endurar Insulation Resista nbient Operating Tempera Ambient Humid Storage Humidi Pollution Degre Atmosphere ressure Vibration Resistance (/ Vibration Resistance (/ Vibration Resistance (/	Rated Voltage								
Allowable Vol Power Cons Voltage Endurar Insulation Resista nbient Operating Tempera Ambient Humid Storage Tempera Ambient Humid Storage Tempera Atmosphere ressure Vibration Resistance (/ Vibration Resistance // Vibration Resistance // Noise Immunit ctrostatic Discharge Grounding	ted Voltage Range	AC85 to AC265V	DC19.2 to 28.8V	AC85 to AC265V	DC19.2 to 28.8V				
Allowable Vol Power Cons Voltage Endurar Insulation Resista nbient Operating Temp Storage Tempera Ambient Humid Storage Humidi Pollution Degre Atmosphere ressure Vibration Resistanc (/ Vibration Resistanc Noise Immunit ctrostatic Discharge Grounding	Rated Frequency	50 / 60Hz		50 / 60Hz					
Voltage Endurar Insulation Resista bient Operating Temp Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding	owable Voltage Drop	Shorter than 1 cycle	5ms (max.)	Shorter than 1 cycle	5ms (max.)				
Voltage Endurar Insulation Resista bient Operating Temp Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding		Note that pause occurrences must be more than 1 second apart.	5005 (00A.)	(Note that pause occurrences must be more than 1 second apart.)	onis (iliax.)				
Voltage Endurar Insulation Resista bient Operating Temp Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding	wer Consumption	150VA (max.)	110W (max.)	70VA (max.)	90W (max.)				
Insulation Resista nbient Operating Temp Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding		AC1,500V 20mA for 1 minute	AC1,000V 20mA for 1 minute	AC1,500V 20mA for 1 minute	AC1,000V 20mA for 1 minute				
nbient Operating Temp Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding	Endurance	(between charging and FG terminals)	(between charging and FG terminals)	(between charging and FG terminals)	(between charging and FG termin				
nbient Operating Temp Storage Tempera Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding	n Resistance			een charging and FG terminals)					
Storage Tempera Ambient Humid Storage Humidi Pollution Degre Atmosphere ressure Vibration Resistance (/ Vibration Resistance // Vibration Resistance // Noise Immunit ctrostatic Discharge Grounding			Without HDD> 0°C to 50°C						
Ambient Humidi Storage Humidi Pollution Degre Atmosphere ressure Vibration Resistance (/ Vibration Resistance Vibration Resistance Noise Immunit ctrostatic Discharge Grounding				<pre><with hdd=""> 5°C to 45°C <</with></pre>					
Storage Humidi Pollution Degre Atmosphere ressure Vibration Resistance (<i>i</i> Vibration Resistance Noise Immunit ctrostatic Discharge Grounding				o +60°C					
Pollution Degre Atmosphere ressure Vibration Resista Vibration Resista Noise Immunit ctrostatic Discharge Grounding		10 to 90%RH (not Condensing,Wet		10 to 90%RH (not Condensing, Wet bulb temperature					
Atmosphere ressure Vibration Resistance (/ Vibration Resista Noise Immunit ctrostatic Discharge Grounding		10 to 90%RH (not Condensing,Wet		10 to 90%RH (not Condensing,We	et bulb temperature : 39°C max.)				
ressure Vibration Resistance (/ Vibration Resista Noise Immunit ctrostatic Discharge Grounding	-		For use in Pollution Deg						
Vibration Resista Noise Immunit ctrostatic Discharge Grounding	osphere		Free of corr	rosive gases					
Noise Immunit ctrostatic Discharge Grounding	Resistance (Altitude Range)		800 to 1114hPa (2,000m	or lower above sea level)					
Noise Immunit ctrostatic Discharge Grounding									
Noise Immunit ctrostatic Discharge Grounding		<pre><with hdd=""> 10 to 25Hz</with></pre>	Single amplitude: 0.075mm[0.003in] 57 to 150H	z Fixed acceleration: 4.9m/s ² , X, Y, Z directions	10 cycles (for 30 minutes)				
ctrostatic Discharge Grounding	n Resistance	<vvitnout (ssd="" card)="" cf="" hdd="" or=""> IEC 61131</vvitnout>	-2 compliant 5 to 9Hz Single amplitude: 3.5mm	n, [0.14in] 9 to 150Hz Fixed acceleration: 9.8m/s ²	, x, Y, ∠ directions 10 cycles (for 100 mir				
ctrostatic Discharge Grounding	n Resistance	<^^	Noise voltage: 1 500V/s s. Dulas duration	5000 50000 100 Pice time: 100 /1/	simulator)				
Grounding	n Resistance		Noise voltage: 1,000Vp-p, Pulse duration Noise voltage: 1,000Vp-p. Pulse duration	: 50ns, 500ns, 1 μ s, Rise time: 1ns (via noise : 50ns, 500ns, 1 μ s, Rise time: 1ns (via noise	simulator)				
Grounding									
	Immunity		,	00-4-2 Level 3)					
Ctructure	e Immunity Discharge Immunity			Same for FG and SG terminals)					
	Immunity Discharge Immunity Dunding								
External Dimensi	e Immunity Discharge Immunity	Equivalent IP65f NEMA#250 TYPE4X / 12 (When embedding the panel and not using the front panel USB port.) ⁵							
Weight	Immunity Discharge Immunity Dunding ructure	W395 x H294 x D100mm[W15.55 x H11.57 x D3.94in.] W395 x H294 x D60mm[W15.55 x H11.57 x D2.36in.] 8kg[17.6lb] max. (main unit only) 6kg[13.2lb] max. (main unit only)							
Cooling Metho	Immunity Discharge Immunity Dunding ructure I Dimensions	8kg[17.6lb] max.		Natural air coolir					
	Immunity Discharge Immunity Dunding ructure I Dimensions Veight	8kg[17.6lb] max.	g by the CPU lan						
uitable for use in Class	Immunity bischarge Immunity bunding ructure Dimensions Veight ng Method	8kg[17.6lb] max. Forced air cooling		guirements for compatibility. Note that operation is					
Expansion SI	Immunity bischarge Immunity bunding ructure Dimensions Veight ng Method	8kg[17.6lb] max. Forced air cooling	ace temperature. *5 Meets the appropriate test rec y. *7 AC models only.	quirements for compatibility. Note that operation is	not gadi antood in ovory on normon.				
Item	e Immunity Discharge Immunity Dunding Tucture I Dimensions Veight ng Method arating Temperature" in se in Class I, Division 2	8kg[17.6lb] max. Forced air cooling		quirements for compatibility. Note that operation is					
1st slot	e Immunity Discharge Immunity Dunding ructure I Dimensions Veight ng Method g Method se in Class I, Division 2 ion Slots	8kg[17.6lb] max. Forced air cooling		quirements for compatibility. Note that operation is	Board size				
Power Supply	Immunity Discharge Immunity Dunding Tucture I Dimensions Veight ng Method ng Method se in Class I, Division 2 ion Slots Item	8kg[17.6lb] max. Forced air cooling	ace temperature, *5 Meets the appropriate test rec y. *7 AC models only.	quirements for compatibility. Note that operation is					

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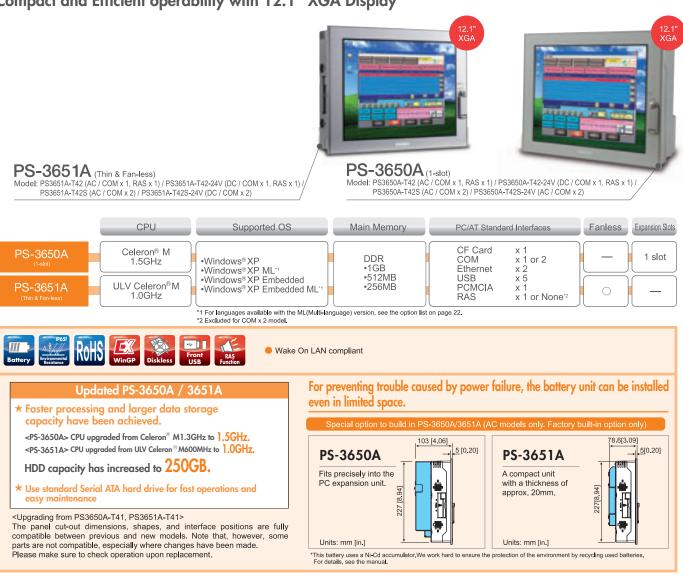
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4V	PS3711A-T42	PS3711A-T42-24V
TFT Co		
1	5"	
262,144	1 colors	
XGA (1,024)	x 768 pixels)	
CCFL (Re	placeable)	
0.297[0.01] x 0.	297mm[0.01in.]	
.1 x H228.1mm	n [M11.97 x H8.98in.]	
	with the software)	
0 / Windows®X	XP / Windows [®] XP Embedded	
	Intel® ULV Celeron®	[®] M 1.0GHz
	512KB (Built in th	ne CPU)
	DDR SDRAM (P 256MB / 512MB / 1GB (S	
Intel® 855G	ME + ICH4	
Built in Inte	Iº 855GME	
nax.(when usin	g windows [®])UMA type	
oenix® First BIC	DS Embedded Pro	
Resistive fi	lm (analog)	
1024 >	(1024	
	HDD or SSD x 1 (r CF card slot (Type II)	
5V Switchable) Connector: D-Sub 9-pin plug	
g	RS-232C (RS-232C / 422 / 485 Switchab	le) Connector: D-Sub 9-pin plug
oin plug	· · · · · · · · · · · · · · · · · · ·	
river)		
TX Auto change	e Connector: Modular jack (RJ-45) x 1	
	change Connector: Modular jack (RJ-45) x 1 *3	
x 5 (Front x 1,	Bottom x 4) Power Voltage: DC5V ±5%, imum Communication Distance: 5m	
1 / /·	r: Mini-DIN 6 pin	
ts, Output: 4 po laximum Rated at Input: 1 point	ints Rated Voltage: DC24V Current: 100mA , Input Voltage: DC12 to 24V b 25-pin plug x 1	
0		

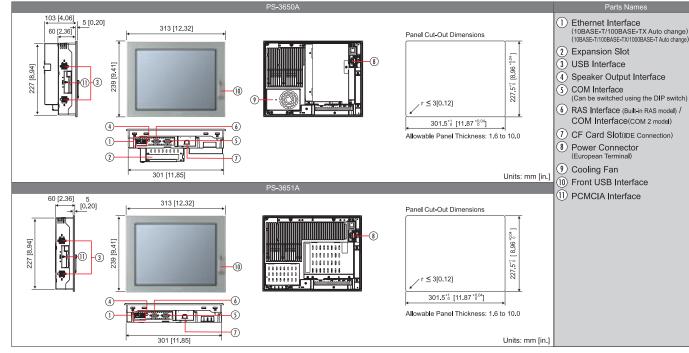


PS3000series

Industrial Computer Designed for Value and High Usability Compact and Efficient operability with 12.1" XGA Display







	Model	PS3650A-T42 PS3650A-T42S PS3650A-T42-24V PS3650A-T42S-24V	PS3651A-T42 PS3651A-T42S PS3651A-T42-24V PS3651A-T42S-24					
	Display Type	De TFT Color LCD						
	Display Size	12.	1"					
	Display Colors	262,144	colors					
	Graphics	XGA (1024 x	768 pixels)					
	Backlight	CCFL (Rep	laceable)					
E	Effective Display Area	W245.76 x H184.32m	m [W9.68 x H7.26in.]					
	Brightness Control	4 levels (adjusted	with the software)					
	Supported OS	Windows® XP / Wind	ows® XP Embedded					
	CPU	Intel [®] Celeron [®] M 1.5GHz	Intel [®] ULV Celeron [®] M 1.0Ghz					
L2 Cache Memory		1MB (Built in the CPU)	512KB (Built in the CPU)					
	Main Memory	DDR SDRAM (PC2700) 256MB /	512MB / 1GB (SO-DIMM x 1 slot)					
	Chipset	Intel® 855GME+ICH4						
	Graphic Accelerator	Built in Intel® 855GME						
	Video Memory	64MB max.(when using windows®)UMA type						
	BIOS	Phoenix First BIOS Embedded Pro						
	Touch Panel Type	Resistive Film (Analog)						
Т	ouch Panel Resolution	1024 x 1024						
	Serial ATA Serial ATA Rev. 1.0 x 1 HDD							
		IDE CF Card Slot (Typell) x1						
		Serial (COM1) RS-232C (RS-232C / 422 / 485 , RI / +5V switcheable) Connector: D-Sub 9-pin plug						
	Serial (COM2)*2	RS-232 (RI / +5V switcheable)						
g	Ethernet (LAN1)	10 BASE-T / 100 BASE-TX Auto change						
Interface	Ethernet (LAN2)	10 BASE-T / 100 BASE-TX / 1000 BASE-T Auto	0					
<u></u>	USB	USB2.0 Connecter: USB Type A x 4 (Side Slot x 4), U Power Voltage: DC5V±5%, Output Current: 500m	JSB1.1 Connector: USB Type A x 1 (Front Slot x 1) A (max.), Maximum Communication Distance: 5m					
	RAS ^{*3}	Input (usable as an external reset input): 2 points, Output: 2 points, Rated Voltage: DC12V, Max	imum Rated Current: 100mA Input Voltage: DC12 to 24V Connector: D-Sub 9-pin socket >					
	Sound	SPEAKER OUTPUT Conn	ector: MINI-JACKø3.5 x 1					
	PCMCIA	PC card slot, compatible with CardBus (*Zoomed Video	and Sound functions excluded) Connector: Type II x 1					

¹ Wake On LAN supported. ¹2 The COM2 serial interface is incorporated only in the serial 2 model. ¹3 The RAS interface is equipped only on the built-in RAS I/F model.

General Specifications

	Model	PS3650A-T42	PS3650A-T42S	PS3650A-T42-24V PS3650A-T42S-24V	PS3651A-T42 PS3651A-T42S	PS3651A-T42-24V PS3651A-T42S-24\		
International Safety Standards		Barre arres (Barres C € 🖉						
Comforming to Standards		UL508, CSA-C22.2 No.142-M1987, EN55011 Class A, EN61000-6-2, EN60950 (AC models only), 47 CFR Part 15 Class A, KCC ^{*6}						
Rated Voltage Rated Voltage Range Power Rated Frequency		AC100	AC100 to 240V DC24V AC100 to 240V		DC24V			
	Rated Voltage Range	AC85	AC85 to 264V DC19.2 to 28.8V		AC85 to 264V	DC19.2 to 28.8V		
Power Supply	Rated Frequency		60Hz		50 / 60Hz			
	Allowable Voltage Drop	Shorter th (Note that pause be more than	occurrences must	5ms (max.)	Shorter than 1 cycle (Note that pause occurrences must be more than 1 second apart	5ms (max.)		
	Power Consumption	110VA	(max.)	80W (max.)	95VA (max.)	40W (max.)		
Voltage Endurance			nA for 1 minute and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)	AC1500V 20mA for 1 minute (between charging and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)		
Insu	lation Resistance	DC 500V 10MΩ (min.) (between charging and FG terminals)						
Ambient Operating Temperature		<with hdd=""> 5 to 50°C <without hdd=""> 0 to 50°C <with hdd=""> 5 to 45°C <without hdd=""> 0</without></with></without></with>				<without hdd=""> 0 to 50°C</without>		
Storage Temperature		-20 to +60°C						
Ar	nbient Humidity	10 to 90%RH (not Condensing, Wet bulb temperature: <without hdd=""> 39°C max., <with hdd=""> 29°C max.)</with></without>						
St	orage Humidity	10 to 90%RH (not Condensing,Wet bulb temperature : 39°C max.)						
P	ollution Degree	For use in Pollution Degree 2 environment max.						
	Atmosphere	Free of corrosive gases						
vir Pressure Vi	bration Resistance (Altitude Range)	800 to 1114hPa (2000m max.)						
Vibr	ration Resistance	<with hdd=""> 10 to 57Hz Single amplitude: 0.0375mm[0.003in] 57 to 150Hz Fixed acceleration: 4.9m/s², X, Y, Z directions 10 cycles (for 80 minutes) <without (ssd="" card)="" cf="" hdd="" or=""> IEC 61131-2 compliant 5 to 9Hz Single amplitude: 3.5mm, [0.14in] 9 to 150Hz Fixed acceleration: 9.8m/s³, X, Y, Z directions 10 cycles (for 100 minutes)</without></with>						
N	loise Immunity		Noi	ise voltage: 1,500Vp-p, Pulse duration: 50ns,	500ns, 1µs, Rise time: 1ns (via noise sim	ulator)		
Electrosta	atic Discharge Immunity	6kV (IEC/EN 61000-4-2 Level 3)						
	Grounding	Functional grounding: D type (Same for FG and SG terminals)						
	Structure	Equivalent IP65f NEMA#250 TYPE4X / 12 (When embedding the panel and not using the front panel USB port.) ²⁴						
Exte	ernal Dimensions	W313	x H239 x D103mm [W	/12.32 x H9.41 x D4.06in.] *5	W313 x H239 x D60mm [\	V12.32 x H9.41 x D2.36in.] *5		
	Weight		4.5kg [9.9 l b] ma	x. (Main unit only)	3.8kg [8.4lb] n	nax. (Main unit only)		
C	cooling Method		Forced Air Cooli	ng by the CPU fan	Natura	Air Cooling		

Expansion Slots

Item	PS-3650A	Board size
1st slot	PCI Rev.2.2 (5V)	174.63 x 106.68mm [6.88 x 4.20in.]
Power Supply	DC5V: 1.5A, DC12V: 0.5A, DC-12V: 0.1A, DC3.3V: 0.5A	

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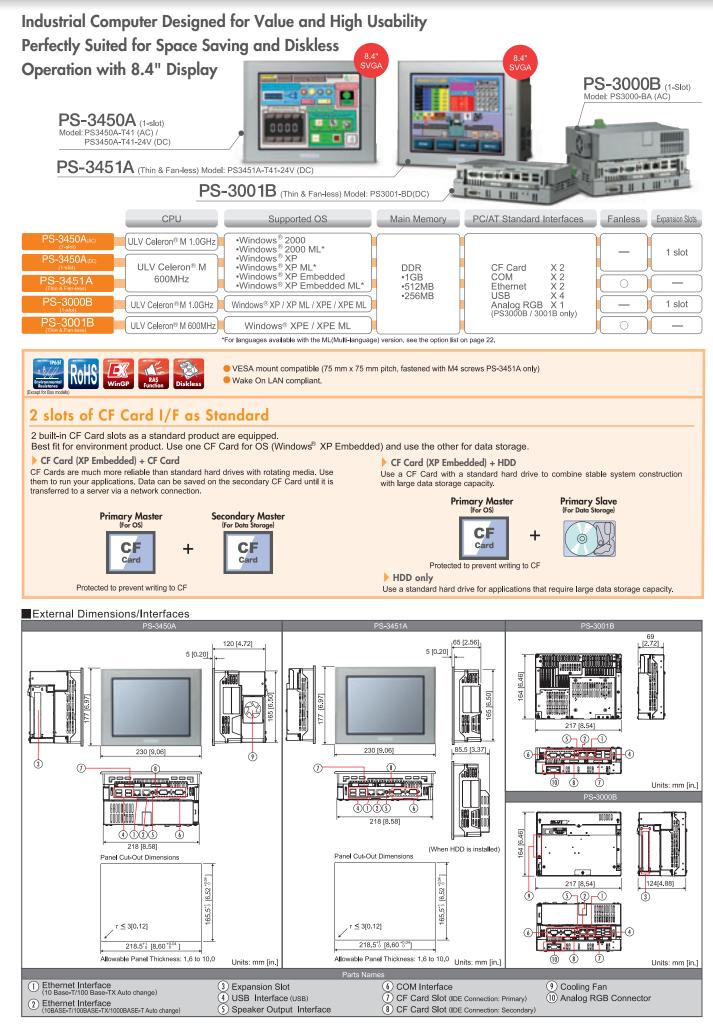
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FP3000

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PS3000series



	Model	PS3450A-T41	PS3450A-T4	1 - 24V	PS3451A-T41-24V		
	Display Type		TFT Color I	_CD			
	Display Size		8.4"				
	Display Colors		262,144 cc	ors			
	Graphics		SVGA (800 x 60	0 pixe l s)			
	Backlight	CCFL (User non-replaceable pa	arts, return system to di	stributor)	CCFL (Replaceable)		
Effective Display Area		W1	172.4 x H129.8mm [W	/6.79 x H5.11i	n.]		
	Brightness Control		4 levels (adjusted with	the software)		
	Supported OS	Windows® 2	2000 / Windows® XP	Windows [®] XI	P Embedded	W	
	CPU	Intel® ULV Celeron® M 1.0GHz	In	tel◎ ULV Cele	ron [®] M 600MHz	1	
	L2 Cache Memory			512KB (built	in the CPU)		
	Main Memory	DDR SDRAM (F	PC2700) 256MB / 512	MB / 1GB (SC	D-DIMM x 1 slot)		
	Chipset				Intel [®] 855GME + ICH4		
	Graphic Accelerator				Built in Intel® 855GME		
	Video Memory			64MI	B max.(when using windows [∞])U	MA typ	
	BIOS	Phoenix® First BIOS Embedded Pro					
	Touch Panel Type		Resistive Film	(Analog)			
1	ouch Panel Resolution		1024 x 10	24			
	IDE	2.5-inch HDD Slot x 1	*1 (Primary Master)	CF Card Slo	ot (Type I / II) x 2 ^{*1} (Primary Slav	/e and	
	Serial (COM1)			RS	-232C Connector: D-Sub 9-pi	n plug	
3	Serial (COM2)		RS-2320	(RS-232C / 4	22 / 485 RI /+5V switchable) Co	onnect	
IIIIeIIace	Ethernet (LAN1)		10BAS	E-T / 100BAS	E-TX Auto change Connecter: I	Modula	
Ē	Ethernet (LAN2)		10BASE-T / 1	00BASE-TX / 1	1000BASE-T Auto change Conne	ecter: N	
	USB	USB2.0 Connec	cter: USB Type A x 4	Power Voltag	e: DC5V±5%, Output Current: {	500mA	
	Sound			SPEAKE	R OUTPUT Connector: MINI-J.	ACK¢	
	Video			Fr	ont 1 port. Mini D-sub 15 pin (so	ocket).	

*1 Can switch between master and slave according to the settings. *2 Wake On LAN supported.

Gene	eral Specification	ons		
	Model	PS3450A-T41	PS3450A-T41-24V	
Internatio	onal Safety Standards		(₩) usted (€)	
Comfo	rming to Standards		A-C22.2, No.142-M1987, EN55011 N60950-1(AC models only), 47 CFR	
	Rated Voltage	AC100 to 240V	DC24	4V
	Rated Voltage Range	AC85 to 264V	DC19.2 to	5 2
Power	Rated Frequency	50 / 60Hz		_
Supply	Allowable Voltage Drop	Shorter than 1 cycle (Note that pause occurrences must) be more than 1 second apart	5ms (n	na>
	Power Consumption	120VA (max.)	65W (max.)	_
Vol	tage Endurance	AC1500V 20mA for 1 minute (between charging and FG terminals)	AC500V 20mA (between charging a	
Insu	ation Resistance		DC 500V 10M	NΩ
Ambient C	Operating Temperature	<with hdd<br=""><without hd<="" td=""><td></td><td></td></without></with>		
Stor	age Temperature			_
An	nbient Humidity	(not Conde	10 to 90 nsing, Wet bu l b temperature: <witho< td=""><td></td></witho<>	
St	orage Humidity		10% to 90%RH (n	ot
Po	ution Degree		For use	in
	Atmosphere			_
Air Pressure Vil	pration Resistance (Altitude Range)			8
Vibr	ation Resistance		<with hdd=""> 10 to 25Hz Single amp Fixed acceleration: 4.9m/s², X, Y, Z D or CF card)> IEC 61131-2 complian Fixed acceleration: 9.8m/s², X, Y, Z</with>	Zd nt
N	loise Immunity		Noise voltage: 1,500Vp-p, Pulse	ə d
Electrosta	tic Discharge Immunity			
Electrostatic Discharge Immunity Grounding			Functional gr	ou
	Structure	Equivalent IP65f NEMA#250 TYPE4X	/ 12 (When embedding the panel and r	not
Exte	rnal Dimensions	W230 x H177 x D120mm	[W9.06 x H6.97 x D4.72in.] W	V230
	Weight	4.0kg [8.8lb] ma	x. (Main unit only)	3.5
С	ooling Method	Forced Air Coolir	ng by the CPU Fan	
*3 Meets a	pplicable testing requirem	ents operation is not, however, guarate	ed in every environment. *4 With HDI	D: '

Expansion Slots

•				
Item	PS-3450A	Board size	PS-3000-BA	Board size
1st slot	PCI Rev.2.2 (5V)	174.63 x 106.68mm [6.88 x 4.20in]	PCI Rev.2.2 (5V)	174.63 x 106.68mm [6.88 x 4.20in]
Power Supply	DC5V: 1.0A, DC12V: 0.25A, DC-12V: 0.1A, DC3.3V: 0.5A		DC5V: 1.0A, DC12V: 0.25A, DC-12V: 0.1A, DC3.3V: 0.5A	

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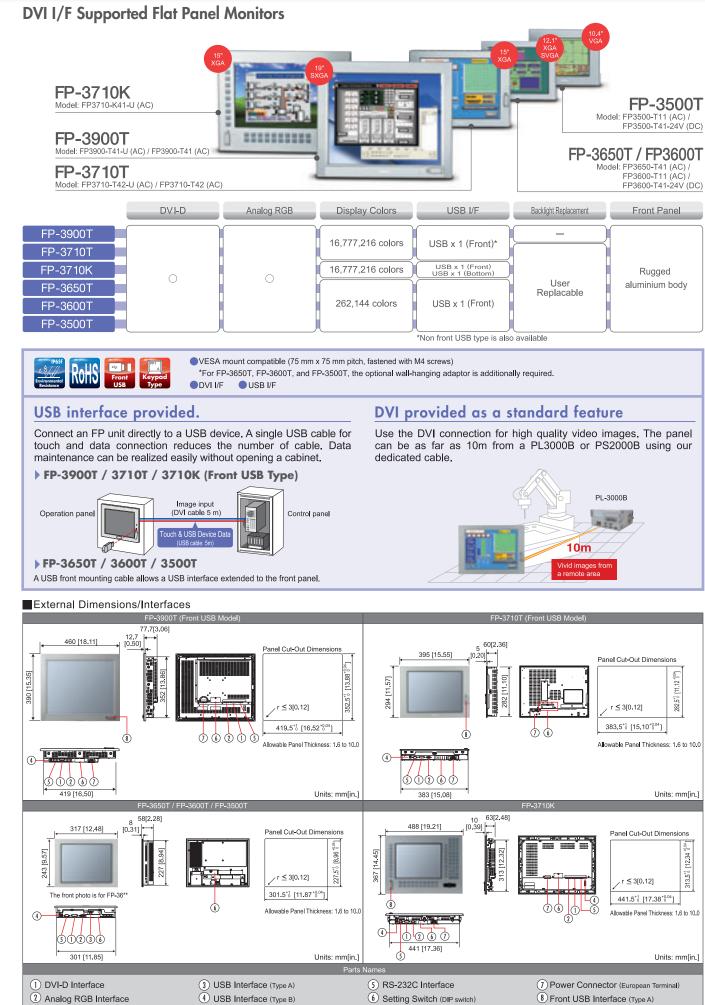
PS3451A-T41-24V	PS3000-BA	PS3001-BD		
	VGA (640 x 480 pixels)	to (1920 x 1080 pixels)		
CCFL (Replaceable)				
mbedded	Windows® XP / Windows® XP Embedded	Windows [®] XP Embedded		
° M 600MHz	Intel® ULV Celeron® M 1.0GHz	Intel® ULV Celeron® M 600MHz		
the CPU)		512KB (built in the CPU)		
IMM x 1 slot)	DDR SDRAM 256MB / 512M	/IB / 1GB (SO-DIMM x 1 slot)		
Intel® 855GME + ICH4				
Built in Intel® 855GME				
ax.(when using windows [∞])UMA	type			
enix® First BIOS Embedded Pro	0			
Гуре I / II) x 2 ^{*1} (Primary Slave a	nd Secondary Master)	CF Card Slot (Type I / II) x 2 (Primary Master and Secondary Master		
32C Connector: D-Sub 9-pin p	lug			
/ 485 RI /+5V switchable) Conn	ector: D-Sub 9-pin plug			
X Auto change Connecter: Mod	dular Jack (RJ-45) x 1			
0BASE-T Auto change Connecte	r: Modular Jack (RJ-45) x 1 ^{*2}			
0C5V±5%, Output Current: 500	mA (max.), Maximum Communication	on Distance: 5m		
OUTPUT Connector: MINI-JACI	<∮3.5 x 1			

PS3451A_T41_24V PS3001-BD 🐘 🚯 🚯 Č E 🧲 UL508, CSA-C22.2, No.142-M1987, EN55011 Class A, EN61000-6-2, Class A art 15 Class A EN60950-1(AC models only), 47 CFR Part 15 Class A, KCC* AC100 to 240V DC24V DC19.2 to 28.8V AC85 to 264V 28.8V 50 / 60Hz ax.) 5ms (max.) Shorter than 1 cvcle 120\/A (max.) 40W (max) 40W (max. for 1 minute nd FG terminals) AC1500V 20mA for 1 minute AC500V 20mA for 1 minute arging and FG terminals en charging and FG terr Ω (min.) (between charging and FG terminals) <With HDD> 5 to 45°C <With HDD> 5 to 50°C 0 to 50°C <Without HDD> 0 to 50°C <Without HDD> 0 to 50°C -20 to + 60°C 10 to 90%RH not Condensing, Wet bulb temperature: 39°C max. ut HDD> 39°C max., <With HDD> 29°C max.) t Condensing, Wet bulb temperature : 39ºC max.) n Pollution Degree 2 environment max Free of corrosive gases 800 to 1114hPa (2000m max.) IEC 61131-2 compliant 5 to 9Hz Single amplitude: 3.5mm, [0.14in] 9 to 150Hz Fixed acceleration: 9.8m/s², X, Y, Z directions 10 cycles (for 100 minutes) litude: 0.075mm[0.003in] 57 to 150Hz directions 10 cycles (for 30 minutes) directions to cycles (of so minutes) is to 9Hz Single amplitude: 3.5mm, [0.14in] 9 to 150Hz directions 10 cycles (for 100 minutes) duration: 50ns, 500ns, 1 μ s, Rise time: 1ns (via noise simulato 6kV (IEC 61000-4-2 Level 3) unding: D type (Same for FG and SG ot using the front panel USB port.)* 230 x H177 x D65mm [W9.06 x H6.97 x D2.56in.]¹⁴ W255 x H164 x D124mm [W10.04 x H6.46 x D4.88in] W255 x H164 x D68.8mm [W10.04 x H6.46 x D2.71in] .5kg [7.7lb] max. (Main unit only) 3.0kg [6.6lb] max.(unit only) 2.0kg [4.4lb] max.(unit only) Natural Air Cooling Forced Air Cooling by the CPU Fan Natural Air Circulation

: W230 x H177x D85.5mm [W9.06 x H6.97 x D3.37in] *5 AC models only



FP3000series



	ormance Speci	FP3900-T41-U	FP3000_T41	EP3710 T42-	J FP3710-T42	FP3650-T41	FP3600	_T11	2600-T41-2414	FP3500-T11	EP3500-T41-24	V FR3710 K41
E	Display Type	1 3300-141-0	-1-5900-141		5		Color LCD					
	Display Size	19'			15"		12.			1	0.4"	15"
	Display Colors	EXCA (1290 v		216 colors	(CA (1004 x 769 piv	ala)	SV/C		62,144 colors		x 480 pixels)	16,777,216 cc
Displ	lay Dots (Pixels)	SXGA (1280 x CCF		X	GA (1024 x 768 pix)	018/	SVG.	A (800 x 6 CCFL	oo hiveis)	VGA (040	∧ +oo pixels)	XGA (1024 x 768 p
	Backlight	(User non-replaceable parts, re)				(Replacea	ble)			
Effoo	tivo Diaplay Area	W376.32 x H3	01.056mm	W304.1 >	x H228.1mm	W245.76 x H184.32r	nm W2	48.0 x H18	6.5mm	W211.2 x	H158.4mm	W304.1 x H228.
	tive Display Area	[W14.82 x H	111.85in.]	[W11.97	7 x H8.98in.]	[W9.86 x H7.26in.		V9.76 x H7	.34in.]	[W8.31 >	(H6.24in.]	[W11.97 x H8.9
	ghtness Control					-	available via					
	uch Panel Type						Film (Analog 4 x 1024	g)				
	Panel Resolution					RS-232C or		e B)*4				
	er of Key Switches						0002.0 (1)p	0.07				74
	ey Switch Type											Membrane Sw
USB ^{*1} USB ^{*1}		USB2.0 Connector: USB Type A x Power Voltage DC5V±5%, Output Current 500mA (max.) Maximum Communicatior Distance: 5m	e: ;;		Max	e: DC5V ± kimum Cor	nmunication Di	irrent: 500mA (m istance: 5m		USB2.0 Connector USB Type A Power Volta DC5V±5% Output Curre 500mA (ma: Maximum Communicat Distance : 5		
	Video				ector: DVI-D 24-pin		alog RGB In			B Shrink 15-pin		
	levice can be connected Emulation Software is ava					the host. *2 A	USB port can	be set on t	ne panel using a	USB front cable (option). *3 Eithe	r one of them is u
	eral Specificati			. ((acciliant of a cartor)							
Oche	Model	FP3900-T41-U	ED2000 T41	ED2710 T42 I	J FP3710-T42	FP3650-T41	FP3600		P3600-T41-24V	FP3500-T11	FP3500-T41-24	V FP3710-K41
_	wodel						4					
Internatio	onal Safety Standards		ΒCE	ULT I	· 🐘 C E 🥌	\$1 ° \$1 °CE	6	La la		6		
Comfor	rming to Standards	UL508, CSA-C22.2, ANSI/ISA-12.12.01-20 No.213-M1987(c-U EN55011 Class A,	07 ¹⁶ , CSA-C22.2, JL Approval) ¹⁶ , EN61000-6-2,	No.142-M198 EN550 EN61000-6-2, EN	, CSA-C22.2, 87(c-UL Approval), 011 Class A, N60950-1 First Edition,	UL60950-1(First Edition CSA-C22.2, No.60950-1-03(c-UL Appro EN55011 Class A, EN61000-6-2, EN60950-1 First Edition	wal). KC0	<u> </u>	IL508, CSA-C22.2, No.142-M1987, EN55011 Class A, EN61000-6-2	КСС	UL508, CSA-C22.2, No.142-M1987, EN55011 Class A, EN61000-6-2	UL508, CSA-C22.2, No.142-M1987(s-UL Approx ANSINSA-12.12.01-2007 CSA-C22.2 No.213-M1987(s-UL A EN55011 Class A, EN6100- EN606641 First Edition.
	Rated Voltage	EN60950-1 First Edition, 4	7 CFR Part 15 Class A	1	t 15 Class A, KCC 00 to 240V	EN60950-1 First Edition	י		DC24V	AC100 to 240V	DC24V	47 CFR Part 15 Class A AC100 to 24
				t 1.1A (max.)	10 10 240 0	AC100V	at 0.9A (max	.)		AC100V at 0.9A (max.)		A0400V -+ 4 4 4 (
Power	Power Consumption			t 0.7A (max.)			at 0.45A (max		2.08A (max.)	AC240V at 0.45A (max.	2.08A (max.)	AC240V at 0.7A (i
Supply	Allowable Voltage Drop		(Note that pau		than 1 cycle must be more than	1 second apart;)		10ms (max.)	Shorter than 1 cycle (Note that pause occurrences must be more than 1	10ms (max.)	Shorter than 1 o (Note that pau occurrences m be more than
Voltage Endurance AC1500V at 20mA				1 minute (betwee	en the charging and	grounding FG t	ermina l s)		1000V at 20mA for 1 minute tween charging and)	second apart) AC1500V at 20mA for 1 minute / between charging and	AC1000V at 20n for 1 minute (between charging an	AC1500V at 20
								1	FG terminals /	FG terminals	FG terminals	d) (between charging FG terminals
	lation Resistance					MΩ (min.) (bet						
	Dperating Temperature				0°C to 50°C (with		the installing to +60°C	angle vert	cal direction)			
	age Temperature				10% to 90%RH			emperatur	e: 30°C may)			
	orage Humidity				10% to 90%RH							
	ution Degree					e in Pollution D	-					
	Atmosphere					Free of c	orrosive gase	es				
Vibra	ation Resistance	IEC 6	1131-2 comp l iar	nt 5 to 9Hz Sing	le amplitude: 3.5mm	n, [0.14in] 9 to 1	50Hz Fixed	acceleratic	n: 9.8m/s², X, \	, Z directions 10	cycles (for 100 i	ninutes)
N	loise I mmunity	Nois	e Voltage: 1500		ration: 50ns, 500ns, se simulator)	1µs, Rise Tim	e: 1ns	100	Noise Voltage: Wpp, Pulse Duration: 1µs Rise Time: 1ns a noise simulator)	Noise Voltage: 1500Vp.p. Pulse Duration: 1µ: Rise Time: 1ns (via noise simulator	Rise Time: 1ns	Rise Time: 1
Electrostat	tic Discharge Immunity Grounding		<ac mo<="" td=""><td>odel> Protective g</td><td>rounding: D type (San</td><td></td><td>1000-4-2 Lev 6 terminals)</td><td>el 3)</td><td></td><td></td><td></td><td></td></ac>	odel> Protective g	rounding: D type (San		1000-4-2 Lev 6 terminals)	el 3)				
	Structure			-	lent IP65f (When e				-			
Exte	ernal Dimensions	W460 x H390			l294 x D60mm		W317 x H243 x D58mm				W488 x H367 x D6	
2/10		[W18.11 x H15.3			11.57 x D2.36in.]				x H9.57 x D2.			(W19.21 x H14.45 x D2
	Weight	10.0kg [22. (Main un			15.4lb] max. i unit only)				kg [7.7lb] max. 1ain unit only)			8.0kg [17.6lb] n (Main unit on
5 Meets ar	pplicable testing requirer for use in Class I, Divisio							(1)	iani anic oniy)			(Main and On
Interf	face Specificat		and D Hazardous									
inp	out Signal Type			DV I- D					Imac	Analog RGB ge Signal: Analog	RGB	
Input S	Signal Characteristic			DVI-D				Synch	ronous Signal:	TTL level, negati	ive true or positiv	/e true
								ONTRAS		ng Mode: Non-in SS, H-POS, V-PO		
	Adjustment Function etting via OSD)	CONTRAST, E	BRIGHTNESS, S	SHARPNESS, D	IMMER, DEFAULT	(ALL RESET)			DIMMER, SHA	RPNESS, AUTC RAST, BRIGHTN	ADJUSTMENT	
				A	vailable Number of	Dots (pixels) D	isplayed					
	SXGA (FP-3900			3650T / FP-3710			SVGA (FF				VGA (FP-3500	
Size 640 x 400	H Sync V S 0 31.469kHz 70.0		Size 640 x 400 2		Sync Dot Clock 420Hz 21.053MHz	Size 640 x 350*7*9	H Sync 31.469kHz	V Sync 70.000Hz	Dot Clock 25.175MHz			Sync Dot Clo 00Hz 25.175M
640 x 480	0 31.469kHz 59.9	92Hz 25.175MHz	640 x 400 3	31.469kHz 70.0	000Hz 25.175MHz	640 x 400	24.827kHz	56.420Hz	21.053MHz	640 x 400 2	4.827kHz 56.4	20Hz 21.053N
640 x 480					992Hz 25.175MHz		31.469kHz	70.000Hz				00Hz 25.175M
640 x 480 640 x 480					670Hz 30.240MHz 000Hz 31.500MHz		31.469kHz 35.000kHz	59.992Hz 66.670Hz				92Hz 25.175N 00Hz 28.320N
720 x 400 [•]	10 31.469kHz 70.0	00Hz 28.320MHz	720 x 400 ^{•10} 3	31.469kHz 70.0	000Hz 28.320MHz	640 x 480	37.861kHz	72.810Hz	31.500MHz			00Hz 28.320
800 x 600						720 x 350*7*9*10	31.469kHz	70.000Hz				
800 x 600 800 x 600					000Hz 49.500MHz 004Hz 65.000MHz		31.469kHz 35.156kHz	70.000Hz 56.250Hz				
1024 x 76	8 48.363kHz 60.0	04Hz 65.000MHz	1024 x 768 5	56.476kHz 70.0	069Hz 75.000MHz	800 x 600	37.879kHz	60.317Hz				
1024 x 76			1024 x 768 6	60.023kHz 75.0	029Hz 78.750MHz							
1024 x 76 1280 x 102						-						
1280 x 102		00Hz 134.999MHz										
					lines will be enlarged t				D [0			
9 In case o	of vertical line, 400 lines i	ncluding upper and lo	wer 50 lines will b	be enlarged to 600) lines (1.5 times) *1	0 To display in the second	nis resolution,	turn the OS	D [System Settir	ngs] : [720 X 400M	lode] to ON.	
				Inlo	od C					(m) (r)		
Ce		cate	JUW		<u>au d</u>	<u>FIV</u>				Alexandren and Alexandren		· Breeze
	ational Safety Sf	andards and t	he guarante	ee of the cor	mpatibility for	EU RoHS d		surance.				
	ational Safety St	andards and t	he guarante	ee of the cor	mpatibility for entation for custome	EU RoHS d		surance.				

Now on sale Special Hard

DVI I/F Supported Flat Panel Monitors

P3650-T41	FP3600-T11	FP3600-T41-24V	FP3500-T11	FP3500-T41-24V	FP3710-K41-U
TFT Co	or LCD				
	12.1"		1	0.4"	15"
		262,144 colors			16,777,216 colors
)	SVGA (800	x 600 pixe l s)	VGA (640	x 480 pixels)	XGA (1024 x 768 pixels)
		CFL ceable)			<u>`</u>
45.76 x H184.32mm W9.86 x H7.26in.]	W248.0 x I [W9.76 x	H186.5mm H7.34in.]		H158.4mm (H6.24in.]	W304.1 x H228.1mm [W11.97 x H8.98in.]
Adjustment ava	ailable via OSD				
Resistive Fi	lm (Analog)				
1024 >	(1024				
RS-232C or US	B2.0 (Type B)*4				
					74
					Membrane Switch
Pov	ver Voltage: DC5	USB2.0 ^{*2} nector: USB Type V ±5%, Output Cu Communication Di	rrent: 500mA (m	ax.),	USB2.0 Connector: USB Type A x 1 Power Voltage: DCSV±5%, Output Current: 500mA (max.), Maximum Communication Distance : 5m

P3650-T41	FP3600-T11	FP3600-T41-24V	FP3500-T11	FP3500-T41-24V	FP3710-K41-U	
€)° //	æ	(N) • € (N) • • • • • • • • • • • • • • • • • • •	æ	(N) • ⊕ ⊕ • C €	€) ∙∰ (∰ ce	
80950-1(First Edition), CSA-C22.2, 950-1-03(c-UL Approval), EN55011 Class A, EN61000-8-2, 460950-1 First Edition	ксс	UL508, CSA-C22.2, No.142-M1987, EN55011 Class A, EN61000-6-2	ксс	UL508, CSA-C22.2, No.142-M1987, EN55011 Class A, EN61000-6-2	UL508, CSA-C22.2, No.142-M19871-U.4. Approval, ANSHSA-12.12.01-4007 ¹⁶ , CSA-C22.2 No.213-M1980[-U.4. Approval] ¹⁰ , EN50011 Class A.EN51006-2, EN500501 First Edition, 47 CFR Part 15 Class A.	
		DC24V	AC100 to 240V	DC24V	AC100 to 240V	
AC100V at AC240V at 0		2.08A (max.)	AC100V at 0.9A (max.) AC240V at 0.45A (max.)	2.08A (max.)	AC100V at 1.1A (max.) AC240V at 0.7A (max.)	
cond apart)		10ms (max.)	Shorter than 1 cycle (Note that pause occurrences must be more than 1 second apart)	10ms (max.)	Shorter than 1 cycle (Note that pause occurrences must be more than 1 second apart)	
unding FG terr	mina l s)	AC1000V at 20mA AC1500V at 20mA AC1000V at 20mA for 1 minute (between charging and) FG terminals FG terminals		AC1500V at 20mA for 1 minute (between charging and FG terminals		
(min.) (betwe	en charging and F	=G terminals)				
30°C from the	installing angle v	ertical direction)				
-20 to	+60°C					
Condensing,	Wet bulb tempera	ture: 39°C max.)				
Condensing,	Wet bu l b tempera	ture: 39°C max.)				
Pollution Deg	ree 2 environmer	nt max.				
Free of corr	osive gases					
.14in] 9 to 150	Hz Fixed acceleration	ation: 9.8m/s², X, \	/, Z directions 10	cycles (for 100 mir	nutes)	
, Rise Time: 1ns		Rise Time: 1ns	Noise Voltage: 1500Vp-p, Pulse Duration: 1µs Rise Time: 1ns (via noise simulator)	Rise Time: 1ns	Rise Time: 1ns	
6kV (IEC 6100	0-4-2 Level 3)					
or FG and SG te	erminals) <dc mo<="" td=""><td>del> Functional grou</td><td>unding: D type (Sam</td><td>ne for FG and SG te</td><td>erminals)</td></dc>	del> Functional grou	unding: D type (Sam	ne for FG and SG te	ermina l s)	
edding the pan	el and not using t	he front panel US	B port.)*5			
		317 x H243 x D58r .48 x H9.57 x D2.			W488 x H367 x D63mm [W19.21 x H14.45 x D2.48in.]	
3.5kg [7.7lb] max. 8.0kg [17.6lb] (Main unit only) (Main unit o						



sale

PLSERIES	Industrial panel computer
Supporting up to 4 Expansion Slots and ISA Bus Last Order Date : Scheduled for November 2010	15" 12.1" SVGA
CPU Supported OS Main Memory PC/AT Standard Interfaces Power Supple PL-7930T • Pentium®M • Windows® 2000 • Unidows® 2000 • Unidows® 2000 • Unidows® XP • Unidows® 2000 • Unidows® XP • Use X 3 PL-6930T • Celeron®M • Celeron®M • Windows® XP • Use X 3 • CMCIA X 1 PL-6931T • Options • Windows® XP Embedded • Unidows® XP Embedded ML • CF Card • CD-ROM drive	Only for Celeron® M
Wiles Wiles Wiles Wiles EOL For more details on specifications and optional items, see our website (www. PLSERIES	proface.com). Industrial panel computer
Supporting up to 3 Expansion Slots and Fan-less Operation Last Order Date : Scheduled for November 2010	U.4" VGA
CPU Supported OS Main Memory PC/AT Standard Interfaces Power Supply PL-5910T ULV Celeron® Windows® 2000 SDRAM Ethernet X 1 COM X 3 .4C100V .256MB .256MB .256MB .222 PL-5911T PL-5911T .256MB .222 .2 .2	C Fanless Expansion Slots PCI/ISA 3 slots PCI/ISA 1 slot

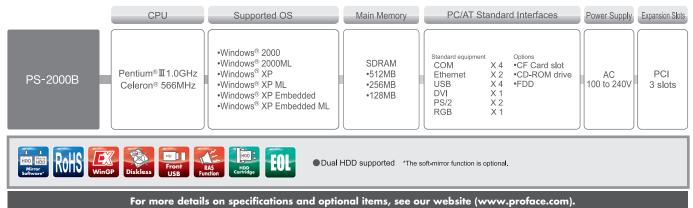


For more details on specifications and optional items, see our website (www.proface.com).

PSSERIES

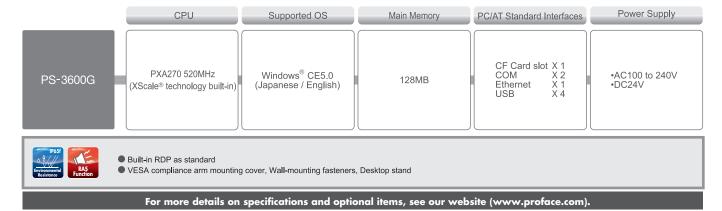
Expandable Units in a Small Spece-saving Package

Last Order Date : Scheduled for November 2010



PSSERIES

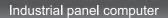
Built in Windows[®] CE5.0, Perfectly Suited for **POP Terminal Application**



PL3000









Optional Items List

PL3000 SERIES

		Product Name			Model No.	PL-3900T	DI 3700T	PL-3600T	PL-3700K		PL-3000E
		Product Name				PL-39001	PL-37001	PL-36001	PL-3700K	PL-3000K	PL-3000E
	512MB			CA7-DDR2-512MB-BLD	•	•	•	•	•	•	
	DIM Module DDR2			1GB	CA7-DDR2-1GB-BLD	•	•	•	•		
				2GB	CA7-DDR2-2GB-BLD	•	•				
	HDD Unit			250GB	APL3000-HD250-BLD	•			•		
(0	SSD Unit ^{*1}			16GB	APL3000-SD16-BLD		•		•	•	
Factory Built-in options			Windows® 2000		APL3000-HD250-W2K-CD-BLD	•					
.9		Core [™] Duo Version	Windows® XP		APL3000-HD250-WXP-CD-BLD	•	•	•	•	•	•
đ			Windows® XP ML		APL3000-HD250-WXP/ML-CD-BLD	•		•		•	
0	OS Pre-installed HDD		Windows® 2000	250GB	APL3000-HD250-W2K-CM-BLD					•	•
- <u>-</u> -		Celeron® M Version	Windows® 2000 ML		APL3000-HD250-W2K/ML-CM-BLD						•
÷			Windows® XP		APL3000-HD250-WXP-CM-BLD				•	•	
gu			Windows® XP ML		APL3000-HD250-WXP/ML-CM-BLD	•			•		
Ë.		Core [™] Duo Version	Windows® XP		APL3000-SD16-WXP-CD-BLD	•	•	•	•	•	
ŝ	OS Pre-installed SSD		Windows [®] XP ML	16GB	APL3000-SD16-WXP/ML-CD-BLD	•		•		•	•
ä	COTTO MOLANCE COD	Celeron® M Version	Windows [®] XP	1000	APL3000-SD16-WXP-CM-BLD					•	
ä			Windows® XP ML		APL3000-SD16-WXP/ML-CM-BLD						
LL.	Windows® XP Embedded SP2	Core [™] Duo Version	ML	2GB	APL3000-XPE2G-CD-BLD					•	
	Supported CF card	Celeron® M Version	ML	200	APL3000-XPE2G-CM-BLD						
	DVD-ROM Drive Unit				APL-DVDU-01-BLD	•				•	
	DVD multi drive				APL-DVDMU-BLD					•	
	Battery Unit*1*2				APL3000-BATTU-BLD	•	•	•		•	
				512MB	CA7-DDR2-512MB				•		
	DIM Module DDR2			1GB	CA7-DDR2-1GB						
	2GB				CA7-DDR2-2GB						
	HDD Unit 250GB			APL3000-HD250							
	SSD Unit 16GB			APL3000-SD16							
	128MB 256MB 512MB 1GB 2GB				CA3-CFCALL/128MB-01						•
				256MB	CA3-CFCALL/256MB-01					•	•
ŝ					CA3-CFCALL/512MB-01					•	
Ë					CA6-CFCALL/1GB-01	•			•	•	•
Ę				CA8-CFCALL/2GB-01	•						
d	Software Mirroring Utility*1				APL-SM3000						•
0	USB Front Cable			1m	CA5-USBEXT-01						•
≥	USB Cable			5m	FP-US00	•				•	•
Accessory Options	RS-232C Cable			5m	FP61V-IS00-O						
ŝ	DVI-D Cable			5m	FP-DV01-50						
ů.				10m	FP-DV01-100						
AC	Analog RGB Cable *3			4.5m	FP-CV02-45	•					
4	DVI-I/RGB Conversion Cable)		5m	CA7-CBLCVRGB-01						
	DVI-D/RGB Branch Cable			15cm	CA7-CBLCVDVI-D/RGB-01						
					CA7-DFS12-01						
	Screen Protection Sheet (5 S	Sheets/set)			CA3-DFS15-01						
					CA7-DFS19-01						
	AC Power Connector (Right a				CA7-ACCNLR-01					•	
	Panel Cutout Conversion Ins		set for top and bottom)*5		APL3600-ATP69X0-01						
S	Battery Unit for Replacement	*2*4			APL3000-BATTU	•	•	•	•	•	
Ë					CA7-WPG12-01						
	Installation Gasket ^{*6}				CA7-WPG15-01					•	
E E	I Instal ation Gasket V				CA7-WPG15K-01 CA7-WPG19-01						
Opt						•					
e Opt										•	
nce Opt	Booklight*6				CA3-BLU12-01						
ance Opt	Backlight*6				CA3-BLU12-01 CA7-BLU15-01		•				
enance Opt							•		•		•
ntenance Opt	Backlight ^{*6}				CA7-BLU15-01	•	•	•	•	•	•
Maintenance Options		ht) (5 Sheets/set) *6			CA7-BLU15-01 APL-ATFB-01	•	•	•	•	•	•

11 The Battery Unit and the Software Mirroring Utility are supported only with the HDD Unit.
 *2 Can be installed only in the AC power supply and 4-slot model.
 *3 Use when using the DVI-D/RGB Branch Cable.
 *4 Used for a replacement of the battery unit (Model: APL3000-BATTU-BLD).
 *5 For replacement of the PL69X0 series.
 *6 Included in the product package. To be used for replacement.

PS3000 SERIES (PS-3710A/3711A)

	Product	Name		Model No.	PS3710A	PS-3711A
				PSA-DDR256-BLD	•	•
	DIM Module DDR		512MB	PSA-DDR512-BLD	•	•
			1GB	PSA-DDR1G-BLD	•	•
í	HDD Unit		60GB	PS371XA-HD60P-BLD	•	•
Built-in options	SSD Unit		16GB	PS371XA-SD16P-BLD	•	•
tic		Windows® 2000		PS3710A-HD60P-W2K-BLD	•	
d		Windows® 2000 ML	60GB	PS3710A-HD60P-W2K/ML-BLD	•	
ě		Windows® XP	OUGB	PS3710A-HD60P-WXP-BLD	•	
宁	OS Pre-installed HDD Unit	Windows® XP ML		PS3710A-HD60P-WXP/ML-BLD	•	
i i i	OS Pre-Installed HDD Unit	Windows [®] 2000		PS3711A-HD60P-W2K-BLD		•
ng		Windows® 2000 ML	60GB	PS3711A-HD60P-W2K/ML-BLD		•
		Windows® XP	60GB	PS3711A-HD60P-WXP-BLD		•
E.		Windows® XP ML		PS3711A-HD60P-WXP/ML-BLD		•
ŭ		Windows® XP		PS3710A-SD16P-WXP-BLD	•	
Factory I		Windows® XP ML	4000	PS3710A-SD16P-WXP/ML-BLD	•	
	OS Pre-installed SSD Unit	Windows® XP	16GB	PS3711A-SD16P-WXP-BLD		•
		Windows® XP ML		PS3711A-SD16P-WXP/ML-BLD		•
	CF Card compatible with ML		2GB	PS3710A-XPE2G-BLD	•	
	Windows®XP Embedded SP2	ML	ZGB	PS3711A-XPE2G-BLD		•
	DIM Module DDR		512MB	PSA-DDR512	•	•
	DIM Module DDR		1GB	PSA-DDR1G	•	•
Options	HDD Unit 60GE			PS371XA-HD60P	•	•
ō	SSD Unit			PS371XA-SD16P	•	•
E.			128MB	CA3-CFCALL/128MB-01	•	•
õ			256MB	CA3-CFCALL/256MB-01	•	
	CF Card		512MB	CA3-CFCALL/512MB-01	•	•
5			1GB	CA6-CFCALL/1GB-01	•	•
SS			2GB	CA8-CFCALL/2GB-01	•	•
Accessory	CF Card Adapter			GP077-CFAD10	•	•
8	Unit Stand *2			CA4-STD15-01		•
Ž	Unit Cover			CA4-CVR15-0		•
	Unit Power Supply *3			CA4-PWU15-01		•
	Screen Protection Sheet (5 Sheets/set)			CA3-DFS15-01	•	•
e	Installation Gasket			CA3-WPG15-01	•	•
Ŭ,	Backlight (2/unit)			CA7-BLU15-01	•	
Maintenance Options ¹	Installation Fastener (4 Sheets/set)			CA3-ATFALL-01	•	•
otic	AC Power Connector (Straight)			CA7-ACCNL-01	•	
o air	DC Power Connector (Straight)			CA7-DCCNL-01	•	
ž	DC Power Connector (Right angle)			CA5-DCCNL-01		

*1 Included in the product package. To be used for replacement. *2 Requires for the unit cover. *3 When the unit stand is used, CE/UL standards are not applicable to the PS-3711A and power supply unit.

Software	3

Software		"**" is changed with the version of software.
Product Name	Model No.	Description
Pro EX Ver.**	EX-ED-V**	Screen-creation software
Pro EX Editor License	EX-ED-LICENSE-V**	License for GP-Pro EX Development Environment *1
GP	EX-WINGP-IPC	License for runtime to use GP-Pro EX with WinGP compatible IPC. *2
Server EX Ver ** Developer	EX-SDV-V**	License for date collection and transfer by connecting an IPC to a PC via the Ethernet *3
Server EX Ver.** Developer License	EX-SED-LICENSE	License for Pro-Server EX Development Environment *4
Server EX Ver.** Runtime License	EX-SRT-LICENSE	License for Pro-Server EX Runtime *5

EX-SRT-LICENSE License for Pro-Server EX Runtime *5 EX-MES-LICENSE-V** License key to connect Pro-Server EX and database MES Action License *1 Purchase this product when installing GP-Pro EX in a second or subsequent PC. One license is required for each PC. *2 Included in GP-Pro EX only the license needs to be purchased. *3 Includes the settings editor and Runtime. *4 Purchase this product when installing the settings editor and Runtime in a second or subsequent PC. *5 Purchase this license when installing Runtime only in a second or subsequent PC. One license is required for each PC.

PS3000 SERIES (PS-3650A/3651A)

	Product Name			Model No.	PS-3650A	PS-3651A
S			256MB	PSA-DDR256-BLD	•	•
n	DIM Module DDR		512MB	PSA-DDR512-BLD	•	•
₹i <			1GB	PSA-DDR1G-BLD	•	•
tory options	HDD Unit		250GB	PS365XA-HD250-BLD	•	•
actory in opti	OS Pre-installed HDD	Windows® XP	05000	PS365XA-HD250-WXP-BLD	•	•
Fac Built-in	OS Pre-Installed HDD	Windows® XP ML	250GB	PS365XA-HD250-WXP/ML-BLD	•	•
in i	CF Card compatible with Windows® XP Embedded SP2	ML	2GB	PS365XA-XPE2G-02-BLD	•	•
8	Battery Unit *1			PS365XA-BATTU-BLD	•	•
	DIM Module DDR		512MB	PSA-DDR512	•	•
ũ	Divi Module DDR	1GB	PSA-DDR1G	•	•	
ptions	HDD Unit 250GB			PS365XA-HD250	•	•
bt	CF Card Adapter			GP077-CFAD10	•	•
ō		128MB	CA3-CFCALL/128MB-01	•	•	
≥	CF Card		256MB	CA3-CFCALL/256MB-01	•	•
0			512MB	CA3-CFCALL/512MB-01	•	
SS			1GB	CA6-CFCALL/1GB-01	•	•
cessory			2GB	CA8-CFCALL/2GB-01	•	•
0	USB Front Cable		1m	CA5-USBEXT-01	•	•
Ā	Screen Protection Sheet (5 Sheets/set)			CA5-DFS10-01	•	•
е,	Battery Unit for Replacement*3			PS365XA-BATTU	•	•
Maintenance Options	Installation Gasket*2			CA3-WPG12-01	•	
aintenano Options	Backlight*2			CA8-BLU12XGA-01	•	•
pti	Installation Fastener*2			CA3-ATFALL-01	•	•
O air	AC Power Connector (Straight) (5 Sheets/set) ^{*2}			CA7-ACCNL-01	•	
Σ	DC Rower Connector (Straight) (5 Sheets/set)*?			CA7-DCCNL-01		

DC Power Connector (Straight) (5 Sheets/set)? CA7-DCCNL-01

*1 For AC Models only *2 Included in the product package. To be used for replacement. *3 Used for a replacement of the battery unit (Model: PS365XA-BATTU-BLD).

PS3000 SERIES (PS-3450A/3451A/3000B/3001B)

	Product Name			Model No.	PS-3450A	PS-3451A	PS-3000B	PS-3001B
S			256MB	PSA-DDR256-BLD	•	•	•	
Б	DIM Module DDR		512MB	PSA-DDR512-BLD			•	
pti			1GB	PSA-DDR1G-BLD			•	
0	HDD Unit		40GB	PS345XA-HD40-BLD			•	
Built-in options		Windows® 2000		PS345XA-HD40-W2K-BLD		•		
iii iii	OS Pre-installed HDD Unit	Windows® 2000 ML	40GB	PS345XA-HD40-W2K/ML-BLD				
Б		Windows® XP	40GB	PS345XA-HD40-WXP-BLD			•	
actory		Windows® XP ML		PS345XA-HD40-WXP/ML-BLD		•	•	
ē	CF Card compatible with	Japanese and English Version	1GB	PS345XA-XPE1G-JE-BLD			•	
ac	Windows® XP Embedded SP2	ML		PS345XA-XPE1G-ML-BLD			•	
ш	Windows XF Embedded 3F2	ML	2GB	PS345XA-XPE2G-BLD			•	
	DIM Module DDR		512MB	PSA-DDR512		•	•	
Options			1GB	PSA-DDR1G			•	
.0	HDD Unit		40GB	PS345XA-HD40			•	1
bl			128MB	CA3-CFCALL/128MB-01			•	
			256MB	CA3-CFCALL/256MB-01			•	
≥_	CF Card	512MB	CA3-CFCALL/512MB-01			•		
0 S			1GB	CA6-CFCALL/1GB-01			•	
SS			2GB	CA8-CFCALL/2GB-01		•		
ğ	USB Front Cable 1			CA5-USBEXT-01			•	
Accessory	Analog RGB Cable			FP-CV02-45			•	
-	Screen Protection Sheet (5 Sheets/set)			CA7-DFS8-01		•		
e e	Installation Gasket			CA7-WPG8-01		•		
	Backlight			CA7-BLU8-01		•		
Maintenance Options ⁻¹	Installation Fastener					•		
otic				PS3000-ATFB-01			•	
O ai	AC Power Connector (Straight) (5 Sheets/set)			CA7-ACCNL-01			•	
Σ	DC Power Connector (Straight) (5 Sheets/set)			CA7-DCCNL-01		•		

1 Included in the product package. To be used for replacement.

FP3000 SERIES

	Product Name		Model No.	FP-3900T	FP-3710T	FP-3650T	FP-3600T	FP-3500T	FP-3710
	RS232C Cable	5m	FP61V-IS00-O	•	•	•	•	•	
options	USB Cable *1	5m	FP-US00			•		•	
ō	USB Front Cable	1m	CA5-USBEXT-01			•			
bti	Analog RGB Cable	4.5m	FP-CV02-45			•			
	DVI-I/RGB Conversion Cable	5m	CA7-CBLCVRGB-01			•			
Built-in	DVI-D Cable	5m	FP-DV01-50			•			
ᅶ		10m	FP-DV01-100	•*2	•*2	•*2	•*2	•*2	•*2
. E	Unit Cover		CA4-CVR15-01		•				
B	Desktop Stand 13		CA1-STDLRG-01						
≥	Wall-mounting Adapter *3	CA1-WMALRG-01			•		•		
Factory	Rear Cover	CA1-RCVLRG-01			•				
S		PSL-DF00			•				
ш	Screen Protection Sheet (5 Sheets/Set)		CA3-DFS15-01						
		CA7-DFS19-01							
4			GP570-WP10-MS						
Ś	Installation Gasket		CA3-WPG15-01						
LO LO	Installation Gasket	CA7-WGP15K-01							
Options•4		CA7-WPG19-01	•						
ð			GP577RT-BL00-MS						
0									
ő	Backlight		CA5-BLU12XGA-01			•			
E			CA7-BLU15-01		•				
č					Old model (-T41)				
te E			GP070-AT01			•		•	
- <u>-</u>	Installation Fastener	Installation Fastener							
Maintena	AC Power Connector		CA7-ACCNL-01						
2	DC Power Connector		CA5-DCCNL-01		•				

*3 Rear Cover (Model: CA1-RCVLRG-01) is required. *4 Included in the product package. To be used for replacement.

List of OS Pre-installed Languages for ML (Multi-language)

Windows [®] 2000 ML	19 languages supported: English, Chinese (simplified), Chinese (traditional), Czech, Danish, Dutc and Turkish
Windows [®] XP ML	28 languages supported: English, Chinese (simplified), Chinese (traditional), Czech, Danish, Dutc Turkish, Bulgarian, Croatian, Estonian, Latvia, Lithuanian, Romania, Slovak, Slovene, and Thai
CF Card compatible with Windows [®] XP Embedded(2GB)ML	6 languages supported as the standard: English, Japanese, French, German, Italian, and Spanish For other languages, download from our website "Otasuke Pro!" (http://www.proface.com/otasuke
CF Card compatible with Windows [®] XP Embedded(1GB)ML	English, Chinese (Simplified), Chinese (Traditional), French, German, Italian, Spanish, and Russia

sale

PL3000

PS3000

Industrial Personal Computer Option

tch, Finnish, French, German, Greek, Hungarian, Italian, Polish, Portuguese, Portuguese (Brazilian), Russian, Spanish ıtch, Finnish, French, German, Greek, Hungarian, İtalian, Polish, Portuguese, Portuguese (Brazilian), Russian, Spanish, Sw isn ke/) [Download -> Update/Driver ->Free Software ->XP Embedded Additional Language Installer].



Pro-face has Developed Unique New Technologies to Support State-of-the-Art Manufacturing.



Simplifying HMI application development



Combine GP-Pro EX Screen Creation Software with "WinGP" Runtime Engine to turn your PC into a HMI. This reduces design time and utilizes the features and capabilities of a PC.

HMI Software Runs on Windows System

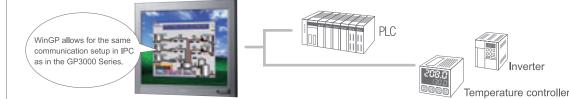
GP-Pro EX, the screen creation software used on Pro-face's programmable operater interface products such as GP3000 Series, is available even on Windows machines.



GP-Pro

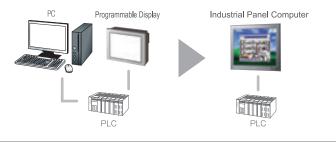
Seamless Communication with Various Controllers

Communication drivers are provided as a standard feature. Development of communication programs for the most of PLCs and temperature controllers are not required.



Downsize System Space

Conventional systems that combine a PC, graphic operater Interface and a PLC can be simplified to an Industrial PC and a PLC.



Combination with user applications

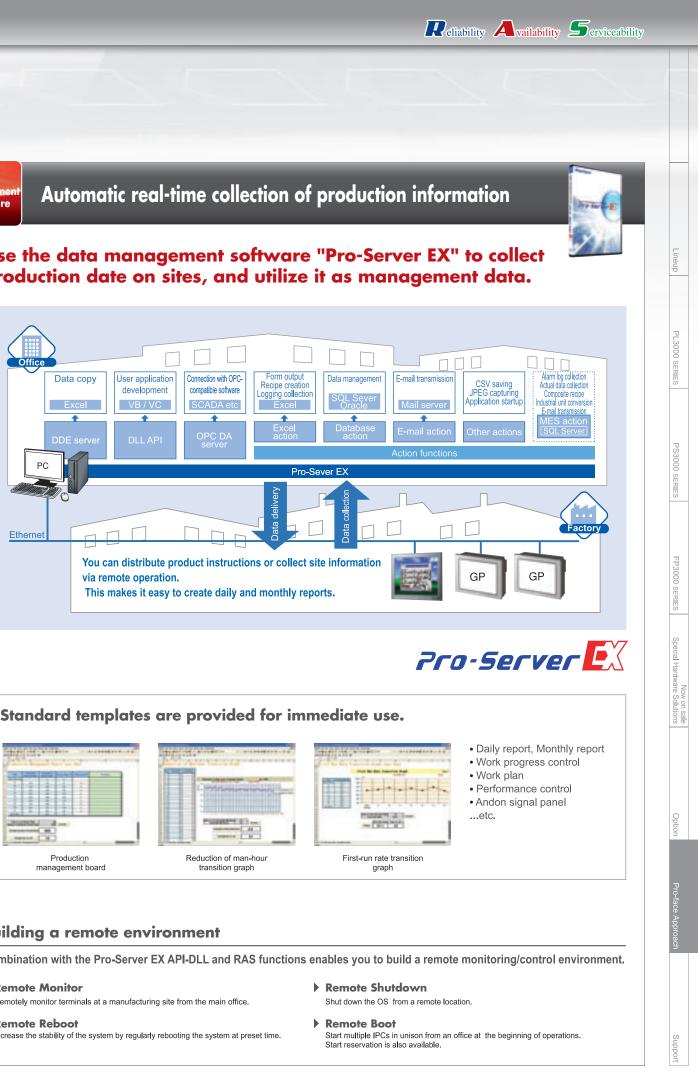
With the dedicated APIs, WinGP provides a flexible link to user applications.

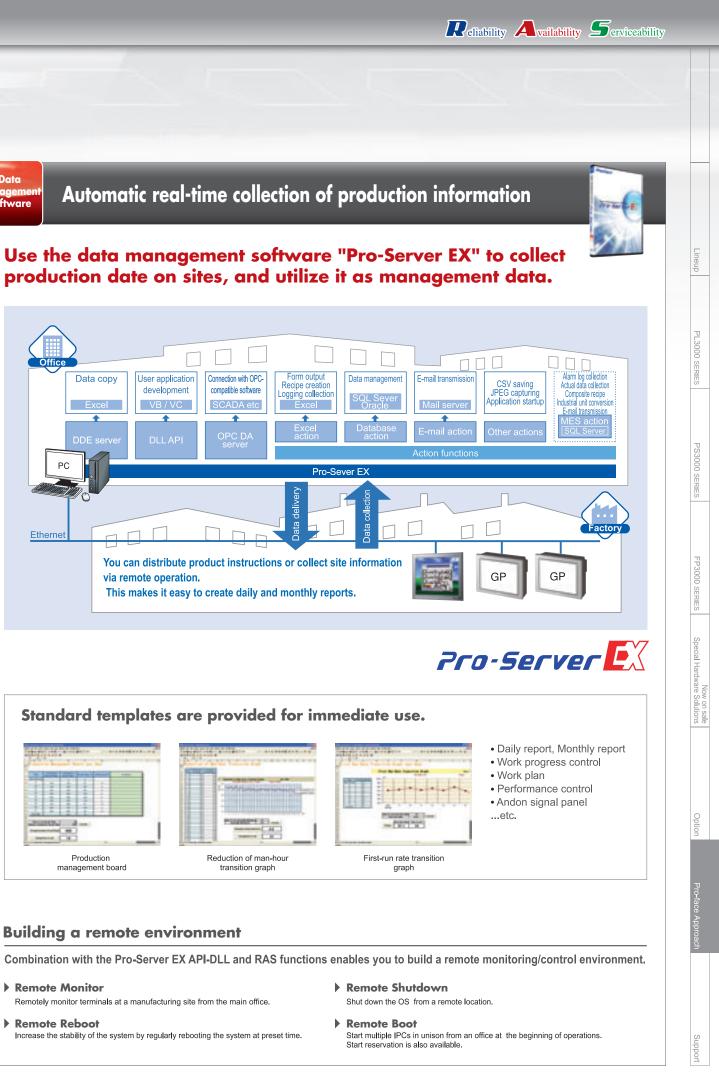
Inverte

- Link to User Database using the Handling API Enables a user application to receive WinGP status and to change its setup. Provided as the DLL file)
- Control from User Application using Device Address API Enables a user application to read/write devices on controllers connected with WinGP (Provided as a DLL file)

Supported Languages Visual C++
 · Visual Basic
 · C#
 · VB.NET
 · VBA







Building a remote environment

- Remote Monitor
- Remotely monitor terminals at a manufacturing site from the main office.
- Remote Reboot

Ц

Pro-face has Developed Unique New Technologies to Support State-of-the-Art Manufacturing.



Protect against data loss due to trouble from strong vibration or shock

Use of a Windows[®] XP Embedded on CF card or SSD unit provides excellent shock endurance without a HDD unit.



Windows[®] XP Embedded CF Card

The CF card is a storage device that provides excellent vibration resistance and shock immunity. By setting the write filter function, you can build a stable system and reduce the risk of data loss.

► Write filter function

No data can be written to a CF card with the settings. The write cycle of CF card can be extended by minimizing the number of writing.



Supports multiple languages Supports all the languages officially supported by Microsoft.*

SSD (Solid State Drive) unit

Flexibly responds to built-in application for your exporting products * For details on supported languages, see the optional items list on page 22

Easy recovery

Through image data backup using the recovery tool, you can quickly rebuild the system environment, eliminating the need for troublesome installation and recovery steps. * You can download the recovery tool from our website "Otasuke Pro!

DMA transfer system

Supports the DMA transfer mode which achieves high-speed data transfer. Compared with the conventional PIO transfer, both Read and Write speeds have been drastically increased.

Startup time drastically reduced

Enables service life monitoring

Incorporates the new function "HORM (Hibernate Once/Resume Many)".* Startup time can be reduced through reading pre-registered images from the memory.

* The CE card must have the same amount of free space as the memory incorporated in the



Supported model: PL3000 Series and PS-3710A/PS-3711A

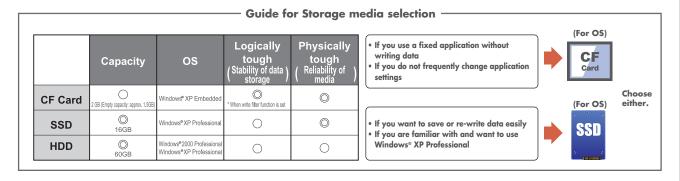
You can check the remaining life with the system monitor's

The SSD unit is a storage device that ensures long service life for data writing while providing higher durability against vibration and shock for data writing than a HDD unit.

The SLC Type SSD

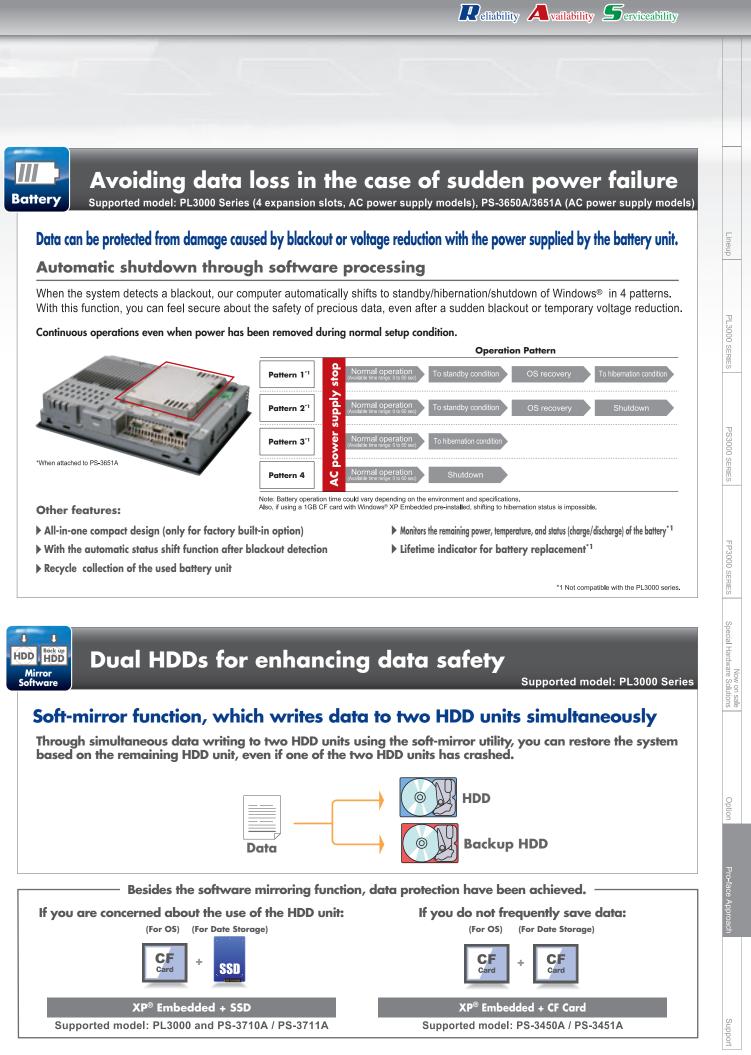
The SLC type enables an approximately 10 times longer writing service life than the MLC type. Ensures secure operation over a long period.

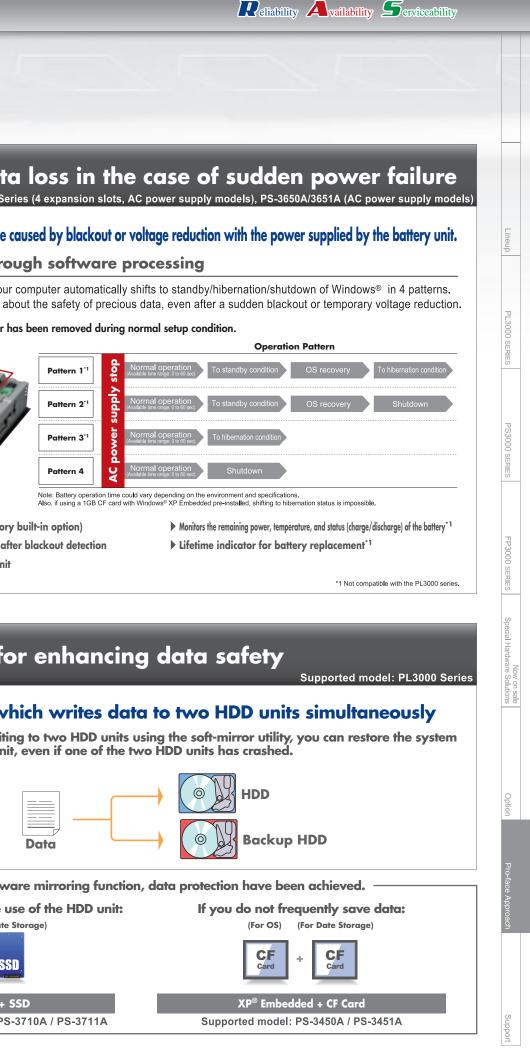
- S.M.A.R.T function. Wear-leveling function
- Reduced power consumption Since the SSD unit doesn't parts regularly activated have power consumption can be reduced. Operation sound is also low.
 - This function evenly distributes data rewriting blocks to remarkably extend the service life, achieving 100,000 operations max.

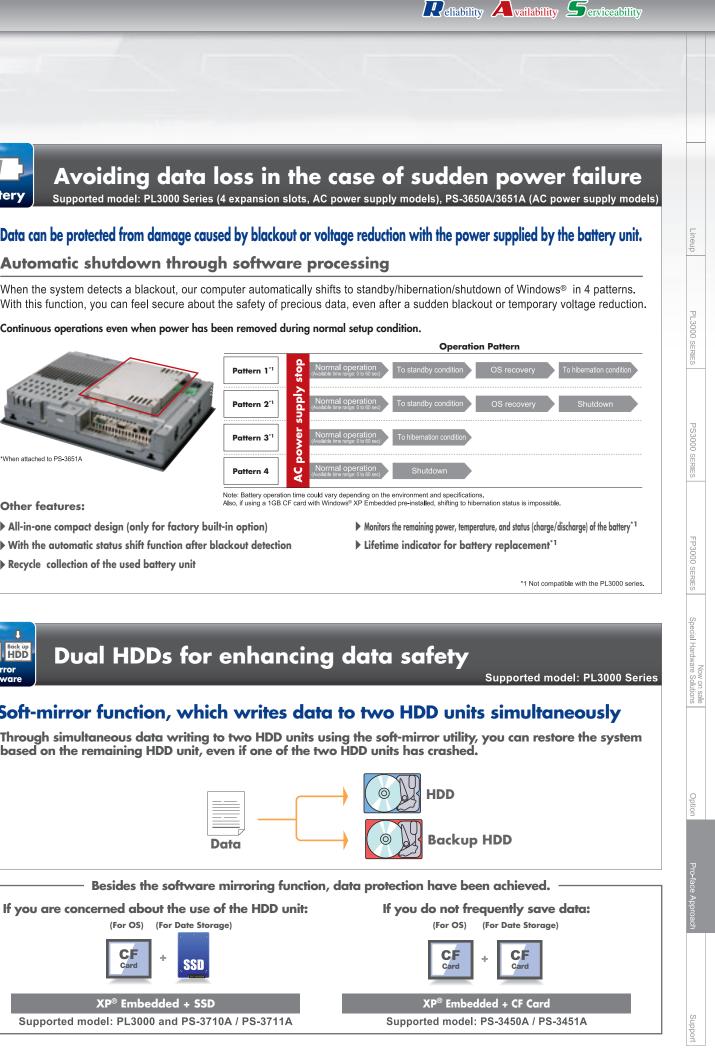










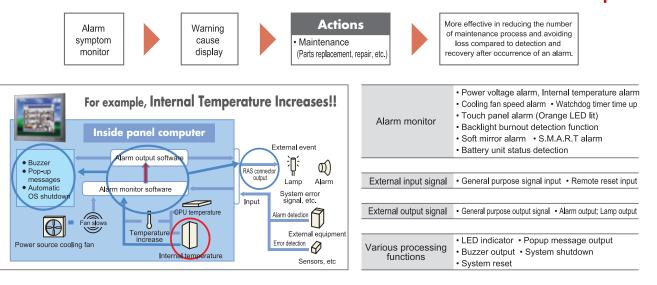


Reliability and Operability "Unique to Pro-face"



Avoiding possible trouble with IPC unit

The RAS function helps to avoid a PC system error before it happens. Preventive countermeasures contribute to reduction in the number of maintenance steps.



System Monitor

Free download from Otasuke Pro! at http://www.pro-face.com/otasuke/

Settings to be activated when an error occurs Stores error records

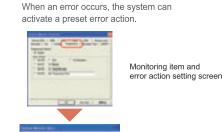
Utility to monitor various situations residing on the task bar. A tool which provides various support regarding the RAS function. The "SMART" function included in this tool monitors for errors and warns if they are detected.

Monitors internal errors

Monitors abnormal temperature, voltage, and fan rotation speed, as well as other errors, such as watchdog timer errors.







Error message screen

HDD

HDD Cartridg



When an error occurs, the event viewer

executes logging to store an error record.

Event viewer screen



Front USB

FP3000

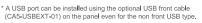
sale Hard Now on Special

> Quickiy connect a variety of peripheral devices

Easy maintenance

Without opening the operation panel, a USB storage device or keyboard can be connected to the unit for simple inspection and maintenance

Also, double security protection is available because you can set whether to use a USB port installed by using a thread-attached front USB fastener and DIP switch.







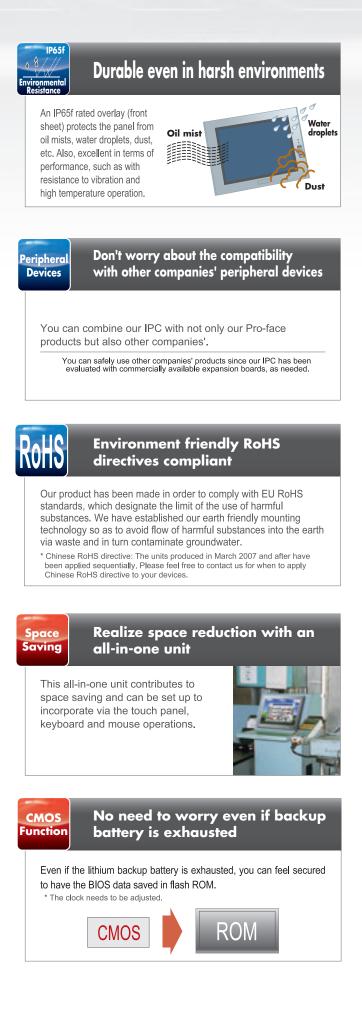
Simple and guick replacement

The cartridge disk system allows hard drives to be replaced without opening the computer.

Hot-swappable. The unit can be replaced without stopping the device even with power turned ON.



* Available only when used with mirror utility software.





Longtime supply for industry

With a design assuming 24-hour continuous operation, our product has gone through a series of hard guality tests. Product components, such as body, parts and OS, are selected to provide long-term availability. Furthermore, we procure the products and offer product support overseas through our global network.

*Even when upgrading from our products, be sure to check the environment and performance on customers' side before use.

Complies with international safety standards

Complies with global safety standards. Our products can be shipped throughout the world and will meet the local safety requirements.



Pane

Intuitive operation possible through direct touch of the screen

With use of a resistive film (analog) touch panel, mouse operation can be substituted by touch and freely performed on the screen. Simple operation is possible even for those who are not good at using a mouse or keyboard.



VESA Arm

Easy installation

Complying with the VESA standard, our products can be installed on an arm or other similar components.

The VESA standard compliant arms are available according to your application.





End-of-life products

The product with this mark is scheduled for EOL. For corresponding replacement models, please visit our website.

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

OtasukePro! > Support Service >PL/PS/FP Series > Compatible Information.