

APL3900T – 19" High-Performance Touch-Panel PC



Available with WinGP

TouchPanel Operation

19-inch TFT Color LCD
Touch-Panel Computer

APL3900T

CPU: Intel® Celeron® M 1.86GHz or Intel® Core™ Duo 2.0GHz

DC 24V
AC100/240V
SXGA

19-inch

All-in-one model Windows XP
RAID SSD
WinGP

UL LISTED, CE, Ro

Features:

- 19" (SXGA 1280 x 1024) TFT touch-panel computer
- Intel® Core™ Duo 2.0GHz or Intel® Celeron® M 1.86GHz CPU
- Bootable CompactFlash® socket
- DVD-RW standard
- Reliability, Availability, Serviceability (RAS) Remote Health Monitor
- IP65f, NEMA 4/4x/12 Rated
- Data protection – RAID1 hard disk option

- RoHS directive-conforming
- UL 1604, Class I, Div 2, Groups A, B, C, D certification is available by request

Open HMI WinGP Option

- Use PC as on-demand touch-screen HMI
- Allows third-party applications to run concurrently
 - SPC, vision, SCADA, MRP
- Expands PC hardware and data connectivity options

Performance Specifications

	Performance	Standard
Base Model	APL3900-TA-CD2G APL3900-TD-CD2G	APL3900-TA-CM18
CPU	Intel® Core™ Duo 2.0GHz	Intel® Celeron® M 1.8GHz
Supported OS	Windows® XP Pro / XP ML	Windows® XP Pro / XP ML
Standard Memory	1.0 Gigabytes/2.0 Gigabytes	1.0 Gigabytes
Maximum Memory	4GB (DIMM socket x 2)	
Graphics Display Resolution	SXGA (1280 x 1024 pixels)	
Video Memory	Max 64MB (UMA type)	
Display Type and Size	TFT Color LCD (19-inch)	
Display Colors	262,144 Colors	
Display Area	W376.3mm [14.81 in.] x H301.0mm [11.85in.]	
Touch Screen	Resistive Film (Analog) Touch Screen, 1024 x 1024	
Serial	COM1: RS-232C, D-sub 9 pin (plug) (RI/+5V switchable, RS-422/RS-485 switchable) COM2: RS-232C, D-sub 9 pin (plug) (RI/+5V switchable) COM3: RS-232C, D-sub 9 pin (plug) COM4: RS-232C, D-sub 9 pin (plug)	
LAN	Rear 2 ports. RJ-45 type modular jack connector (8 pins). LAN1: auto change to 10BASE-T/100BASE-TX/1000BASE-T LAN2: auto change to 10BASE-T/100BASE-TX	
USB	USB 2.0-compatible rear 4 ports, front 1 port. Disable/enable selectable	
Sound	Speaker out (3.5mm mini-pin jack connector)	
RAS (Remote Health Monitor)	Rear RAS connector 9-pin (socket)	
Disk	60 GB hard drive. SATA interface. IDE interface: Master: 8 GB CF card I/F. Slave: DVD-RW 1 slot (option)	
PCI	PCI x 2 or PCI x 4; first 2 slots are: 174.63 [6.88 in.] x 106.68 [4.20 in.] mm; Slots 3 and 4 are: 250 [9.84 in.] x 106.68 [4.20 in.] mm	

General Specifications

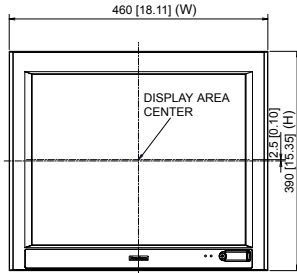
Input Voltage	AC100 / 240V (Rated voltage AC85 to 264V; 50/60Hz)	DC24V (Rated voltage DC19.2 to 28.8V)
Power Consumption	145VA or less	145W or less
Allowable Voltage Drop	1 cycle or less (Voltage drop interval must be 1s or more.)*1	5ms or less
Voltage Endurance	AC1500V 20mA for 1 minute (between charging and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)
Insulation Resistance	DC500V 10MΩ(min.) (between charging and FG terminals)	
Certifications	UL 508; CSA-C22.2 No. 142-M1987; CE Marking EN61000-6-2, EN55011 Class A, EN60950-1 (Only AC model), 47 CFR Part 15 Class A, UL 1604, Class I, Div 2, Groups A, B, C, D certification is available by request	
Temperature	0 to 50°C (32 to 122°F) without HDD; 5 to 50°C (41 to 122°F) with HDD; Storage Temperature: -20 to +60°C (-4 to 140°F)	
Humidity - Ambient/Storage	10 to 90% RH [Not condensing, wet bulb temperature: 39°C (122°F) or less; with HDD: 29°C (84.2°F) or less].	
Corrosive Gas	Free of corrosive gases	
Noise Immunity	Noise Voltage: 1500Vp-p, Pulse Duration: 50ns, 500ns, 1µs Rise Time: 1ns (via noise simulator)	Noise Voltage: 1000Vp-p, Pulse Duration: 1µs Rise Time: 1ns (via noise simulator)
Cooling Method	Forced air cooling by system fan and CPU fan	
Electrostatic Discharge Immunity	6kV (complies with EN 61000-4-2 Level 3)	
Vibration Resistance	IEC61131-2 compliant, With HDD: 10 to 57Hz half-amplitude 0.075mm, 57 to 150Hz constant-accelerated velocity 9.8m/s ² . X, Y, Z directions for 10 cycle (100 minute) Without HDD: 5 to 9Hz half-amplitude 3.5mm, 9 to 150Hz constant-accelerated velocity 9.8m/s ² . X, Y, Z directions for 10 cycle (100 minute)	
Shock during operation	EN/IEC 60068-2-2 compliant, 147m/Sec, 11msec (Approx. 15G), 3 shocks to 3 direction/ axis	
Rating	Equivalent to IP65f, NEMA 4/4x/12 Rated (only when not using front USB)*2	
Weight With DVD-RW	2 slots: Approx. 15.45kg [34.0lb] 4 slots: Approx. 16.45kg [36.2lb]	
External Dimensions With DVD-RW	2 slots: W460mm [18.11in.] x H390mm [15.35in.] x D218.7mm [8.61in.] 4 slots: W460mm [18.11in.] x H390mm [15.35in.] x D270.7mm [10.65in.]	
Warranty	Two-year standard (maximum 4 years)	

*1 Depending on the combined total of the expansion slot power supply and external load power values, the allowable voltage drop may be 20ms or less. *2 Meets IP65f testing requirements. Operation is not, however, guaranteed in every environment.

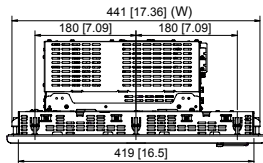
APL3900T - External Dimensions

Note: Dimensions shown with installation fasteners attached

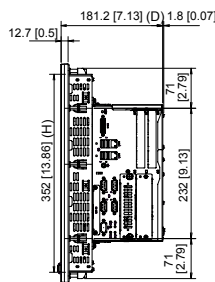
APL3900T (2-slot) Unit: mm [in]



Front

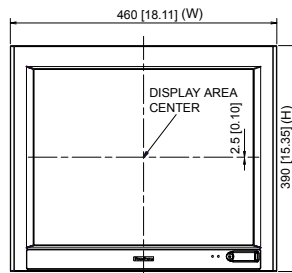


Top

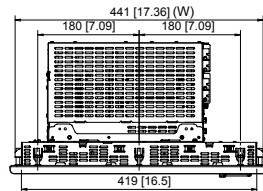


Side

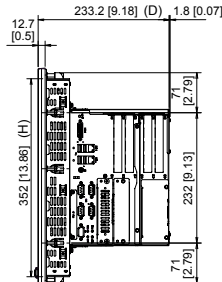
APL3900T (4-slot) Unit: mm [in]



Front



Top

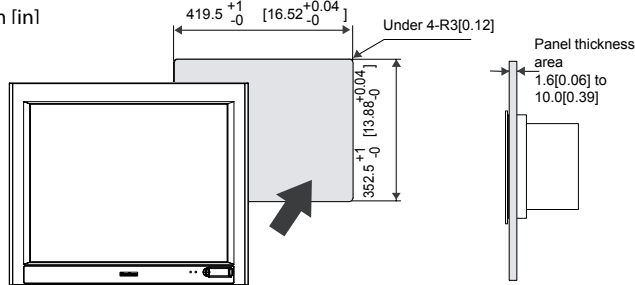


Side

Units are shown without DVD; add 37.5mm [1.47"] to the depth (D).

APL3900T - Cutout Dimensions

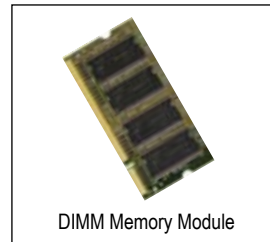
Unit: mm [in]



Optional Items

Product Name		Part Number
DIMM Memory Module	512 MB	CA7-DDR2-512MB
	1 GB	CA7-DDR2-1GB
	2 GB	CA7-DDR2-2GB
HDD Unit *1	60 GB	APL3000-HD60
CF Card*1	512MB	CA3-CFCALL/512MB-01
	1GB	CA6-CFCALL/1GB-01
	2GB	CA8-CFCALL/2GB-01
	8GB	144766
RAID Kit		RAID-KIT-01
USB Front Cable	1m	CA5-USBEXT-01
USB Cable	5m	FP-US00
RS-232C Cable	5m	FP61V-IS00-O
DVI-D Cable	5m	FP-DV01-50
Analog RGB Cable *2	4.5m	FP-CV02-45
RGB Converter Cable	5m	CA7-CBLCVRGB-01
DVI-D/RGB Branch Cable	15cm	CA7-CBLDVDVI-D/RGB-01
External Floppy		9000-USBF
Backlight (2 pieces/set for 1 unit)		Backlight is not field replaceable Contact Sales or Customer Support for further information
Installation Fasteners		APL-ATFB-01
Screen Protection Sheets (5-sheet set)		CA7-DFS19-01

*1 Not installed with operating system. *2 When using the DVI-D/RGB branch cable.



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

- All product names used in this document are trademarks or registered trademarks of their respective companies.
- All information contained in this document is subject to change without notice.

APL3000 Cutout Compatibility

If you have :	This will fit the same cutout :	Notes:
4612T, 3612T, 3510(T), 3512T, 3310T, 3410T, 9460(T), 9462(T), 9410T, 9412T, 3412T, 3312T	APL3600T	
4612KPM(T), 3612KPM(T) 3510KP(T), 3512KP(T), 9460KP, 9462KP, 9410KP(T), 3410KP(T), 3310KP(T), 9412KP(T), 3412KP(T), 3312KP(T)	APL3600K	*1
4615T, 3615T	APL3700T	
4715T, 3715T, 3515(T), 3535T, 9465(T)	APL3700T + Adapter plate	Adapter plate : 145053
4715KPM(T), 4615KPM(T), 3615KPM(T), 3715KPM(T), 3515KPM(T), 3512KPM(T), 3535KPM(T), 9465KPM(T)	APL3700K	

*1 When you Migrate from 3612KPM(T)/4612KPM(T) to APL3600K requires removing attachment plate screwed on APL. More details see APL3000 series Hardware Manual. (The original cutout size with spacers is to keep compatibilities with PL3700, FP3710, AGP3750 and PS3710/11)

APL3900T Ordering Examples

	Order Number	Description
Performance	APL3900-TA-CD2G-2P-1G-XM60-M	19" Touch PC, 2.0GHz Core Duo, 2 PCI, 1GB DRAM, Windows XP, DVD- RW, AC
	APL3900-TD-CD2G-2P-1G-XM60-M	19" Touch PC, 2.0GHz Core Duo, 2 PCI, 1GB DRAM, Windows XP, DVD- RW, 24V DC
	APL3900-TD-CD2G-2P-1G-XM60-M-R	19" Touch PC, 2.0GHz Core Duo, 2 PCI, 1GB DRAM, Windows XP, DVD- RW, 24V DC, RAID
	APL3900-TA-CD2G-2P-1G-XM60-M-R	19" Touch PC, 2.0GHz Core Duo, 2 PCI, 1GB DRAM, Windows XP, DVD- RW, AC, RAID
	APL3900-TA-CD2G-2P-1G-XM60-M-WG	19" Touch PC, 2.0GHz Core Duo, 2 PCI, 1GB DRAM, Windows XP, DVD- RW, AC, WinGP
	APL3900-TA-CD2G-4P-2G-XM60-M	19" Touch PC, 2.0GHz Core Duo, 4 PCI, 2GB DRAM, Windows XP, DVD- RW, AC
	APL3900-TA-CD2G-4P-2G-XPC08-M	19" Touch PC, 2.0GHz Core Duo, 4 PCI, 2GB DRAM, Windows XP (English only) on 8 GB CF, DVD- RW, AC
	APL3900-TA-CD2G-4P-2G-XPC08-M-WG	19" Touch PC, 2.0GHz Core Duo, 4 PCI, 2GB DRAM, Windows XP (English only) on 8 GB CF, DVD- RW, AC, WinGP
Standard	APL3900-TA-CM18-2P-1G-XM60-M	19" Touch PC, 1.86GHz Celeron M, 2 PCI, 1GB DRAM, Windows XP, DVD- RW, AC
	APL3900-TA-CM18-2P-1G-XM60-M-R	19" Touch PC, 1.86GHz Celeron M, 2 PCI, 1GB DRAM, Windows XP, DVD- RW, AC, RAID
	APL3900-TA-CM18-2P-1G-XM60-M-WG	19" Touch PC, 1.86GHz Celeron M, 2 PCI, 1GB DRAM, Windows XP, DVD- RW, AC, WinGP
	APL3900-TA-CM18-4P-1G-XM60-M	19" Touch PC, 1.86GHz Celeron M, 4 PCI, 1GB DRAM, Windows XP, DVD- RW, AC
	APL3900-TA-CM18-4P-1G-XPC08-M	19" Touch PC, 1.86GHz Celeron M, 4 PCI, 1GB DRAM, Windows XP (English only) on 8 GB CF, DVD- RW, AC
	APL3900-TA-CM18-4P-1G-XPC08-M-WG	19" Touch PC, 1.86GHz Celeron M, 4 PCI, 1GB DRAM, Windows XP (English only) on 8 GB CF, DVD- RW, AC, WinGP

* For Floppy options, please purchased External USB Floppy *9000-USB* listed on PC&FP price list

Part Number Breakout

APL3_00- - - - - M- -

Display Size:
 9 = 19"
 7 = 15"
 6 = 12.1"
 0 = no display

Interface:
 T = Touch
 K = Keypad, Touch, and Mouse
 B = Node Box (no interface)

Voltage:
 A = AC 120-240V
 D = DC 24V

Processor:
 CD2G = Intel® Core™ Duo 2GHz
 CM18 = Intel® Celeron® M 1.86Ghz

Number of slots:
 4P = four PCI slots
 2P = two PCI slots

Memory:
 4G = 4 Gigabytes
 2G = 2 Gigabytes
 1G = 1 Gigabyte

WinGP:
 Blank = No WinGP
 WG = WinGP (pre-installed)

RAID:
 Blank = No RAID
 R = RAID (Dual HD and Utility Installed)

DVD-RW (Standard on all units)

Operating System and Drive Type:
 XM60 = Windows® XP Multi-language,
 60GB hard drive
 XPC08 = Windows® XP Pro, 8GB
 CF card. This version of XP Pro supports
 English, French, Spanish, Brazilian
 Portuguese, Japanese, Simplified and
 Traditional Chinese languages.

Note: Not all possible combinations are available

Pro-face America
 Phone: 734.429.4971
 Fax: 734.429.1010
 www.profaceamerica.com

Customer Service Hotline: 734.944.0482

For more information
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