

4600 Series Industrial PCs with Integrated 12.1" or 15.0" LCD Displays

DS-46000(D)



- ### FEATURES
- 12.1" SVGA or 15.0" XGA TFT color flat panels
 - Reprogrammable keypad with integrated mouse, touchscreen only, or both
 - Intel® Celeron® M 1.3 GHz, 512 cache, 400 MHz system bus (optional Pentium® M 2.0 GHz, 2M cache, 533 MHz system bus)
 - Up to 2 GB DRAM (512 MB standard)
 - 80 GB minimum Serial ATA hard drive (optional dual hard drives)
 - 4X AGP graphics with 32 MB video memory (shared with system memory)
 - Four available expansion slots:
 - ♦ One (8.0" max.) PCI expansion slot;
 - ♦ Two (9.0" max.) PCI expansion slots;
 - ♦ One (9.0" max.) PCI or ISA expansion slot
 - 10/100, and 10/100/1000 BaseT Ethernet
 - 4 USB 2.0 compliant ports (one additional 1.1 compatible port on front of KPM units)
 - Three Serial Ports:
 - ♦ 2 RS-232;
 - ♦ 1 Selectable RS-232/422/485
 - Rear accessible Type I/II CompactFlash™ socket
 - DVD-R/W, and floppy drives
 - NEMA 4/4x/12 front panel
 - UL, cUL, CE approvals
 - UL listed for hazardous locations: Class I Division 2, Groups A, B, C, D; Class II Division 2, Groups F and G
 - Windows® XP and 2000 operating system
 - 100-240 VAC power supply
 - 2-year warranty included

Pro-face's newest generation of industrial PCs are designed and tested for the tough environments required for plant floor use. Our standard PC configurations meet the strict specifications required for use in hazardous locations and Europe's CE mark. Based on CPU boards designed specifically for industrial automation, these systems provide the capabilities required by demanding applications. With an installed base of over 300,000 systems, our industrial PC products are successfully applied in manufacturing and process environments world-wide.

Higher Performance, Lower Power

The 4600 series utilizes an Intel mobile processor providing superior processing power while utilizing half the wattage of a comparable Pentium 4 processor. The optional Pentium M 2.0 GHz processor (2 M Cache & 533 MHz system bus) outperforms a desktop Pentium 4, 2.4 GHz (512 K Cache & 533 MHz bus) while utilizing less than half the wattage. With less wattage input the ambient operating temperature is more easily maintained, possibly without the need for expensive enclosure cooling devices. This makes the 4600 series ideal for applications which require a NEMA sealed enclosure.

Easy-to-Read Display

The 4600 series units utilize bright TFT LCD displays. The 4612 units incorporate a 12.1" SVGA (800 x 600) resolution while the 4615 units incorporate a 15.0" XGA (1024 x 768) resolution. In addition the 4600 units automatically share up to 32 MB system RAM to allow full 32-bit color depth and fast 3D rendering.

Fits Your Needs

The 4600 series can be configured many different ways. With four available expansion slots many cost effective, industry standard options are easily integrated. The optional dual hard drive, externally accessible

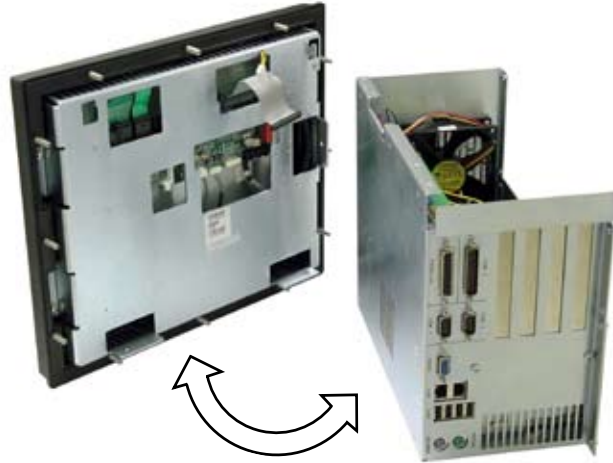
CompactFlash, or RAID-enabled configuration provides the storage solution you require. Additionally the DVD-R/W provides even more storage and backup options.

Meets High Standards

To survive on the plant floor the 4600 series meets FCC, UL, cUL, and European CE mark requirements for industrial automation equipment. Pro-face/Xycom Industrial PCs lead the industry in reliability, service, and support with an optional five year warranty available.

SERVICEABILITY

The 4600 series CPU section easily removes from the front panel and display unit without having to detach the front panel from the NEMA enclosure. The rear CPU section can be replaced with another very quickly. With the cover removed, expansion cards are easily installed without cumbersome cables to contend with.



EASILY REPLACEABLE HARD DRIVE



The 4612 & 4615 units have incorporated a simple to access hard drive mount. Simply loosen 2 captive screws and extract the hard drive. No cables to install or connect; simply plug in the new drive. Optional dual hard drives or RAID-enabled configurations are also available.

STORAGE OPTIONS

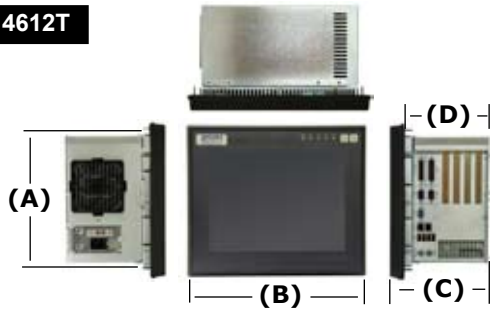
The 4600 series offers several data storage options. The standard unit contains a single Serial ATA hard drive. Dual drives are optional, as well as a RAID-Enabled configuration. Also, the externally accessible Type I/II CompactFlash can be used to further enhance your storage capabilities. The CompactFlash can be ordered with the operating system pre-loaded for a solid state alternative. The 4600 series offers a DVD-R/W, or a floppy for your choice of removable media drives. In addition, the 4 USB 2.0 ports (one additional 1.1 compliant port on front of KPM units) can be utilized to add many commercially available external devices.



Externally Accessible CompactFlash™

PRODUCT DIMENSIONS AND CONFIGURATIONS

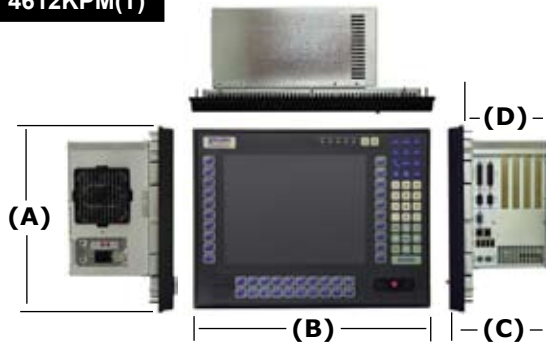
4612T



4612 Unit Dimensions

Model	4612T	4612KPM(T)
Height (A)	11.00" (279.4 mm)	12.45" (316.2 mm)
Width (B)	13.00" (330.2 mm)	16.70" (424.2 mm)
Depth (C)	7.4" (187.0 mm)	7.4" (187.0 mm)
Mounting Depth (D)	6.32" (160.5 mm)	6.36" (161.5 mm)
Weight	22 lbs (10 kg)	24 lbs (10.9 kg)

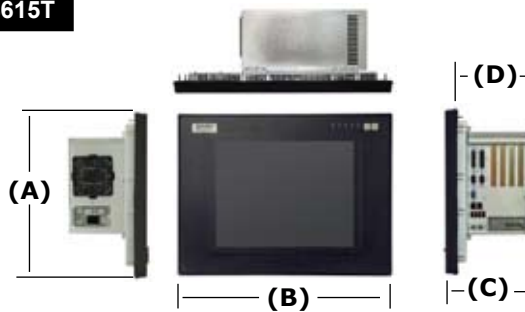
4612KPM(T)



4612 Configurations

Display	12.1" LCD color display, 800 x 600 (SVGA), 300 nits
Operator Input	Analog resistive touchscreen (4612T) Reprogrammable 74-position keypad and industrial mouse (Touchscreen optional) (4612KPM(T))
Processors	Intel® Celeron® M 1.3 GHz or optional Pentium M
Preloaded OS	Windows® XP or Windows® 2000 (multi-language)
Expansion	One (8.0" max.) PCI, two (9.0" max.) PCI, and one (9.0" max.) PCI or ISA

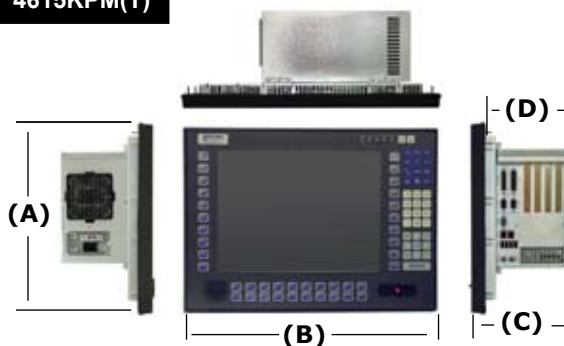
4615T



4615 Unit Dimensions

Model	4615T	4615KPM(T)
Height (A)	12.62" (320.5 mm)	13.97" (354.8 mm)
Width (B)	16.59" (421.4 mm)	19.00" (482.6 mm)
Depth (C)	7.59" (192.8 mm)	7.64" (194.0 mm)
Mounting Depth (D)	6.59" (167.4 mm)	6.60" (167.6 mm)
Weight	25 lbs (11.34 kg)	27 lbs (12.4 kg)

4615KPM(T)

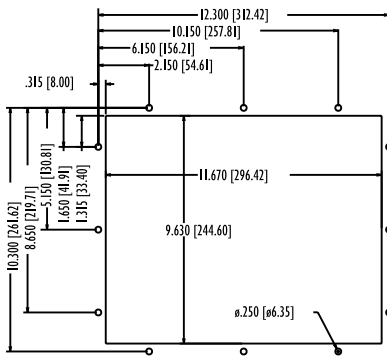


4615 Unit Configuration

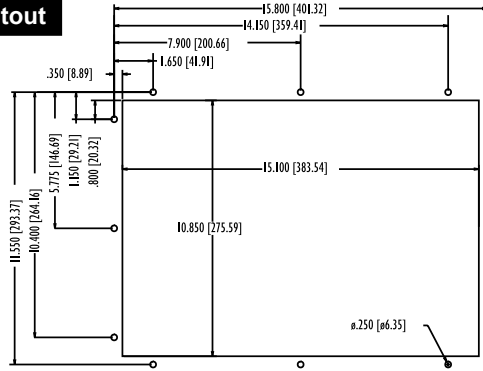
Display	15.0" LCD color display, 1024 x 768 (XGA), 300 nits
Operator Input	Analog resistive touchscreen (4615T) Reprogrammable 74-position keypad and industrial mouse (4615KPM(T))
Processors	Intel® Celeron® M 1.3 GHz or optional Pentium M
Preloaded OS	Windows® XP or Windows® 2000 (multi-language)
Expansion	One (8.0" max.) PCI, two (9.0" max.) PCI, and one (9.0" max.) PCI or ISA

PRODUCT MOUNTING

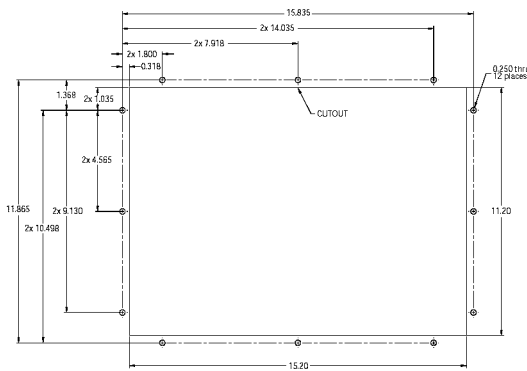
4612T Cutout



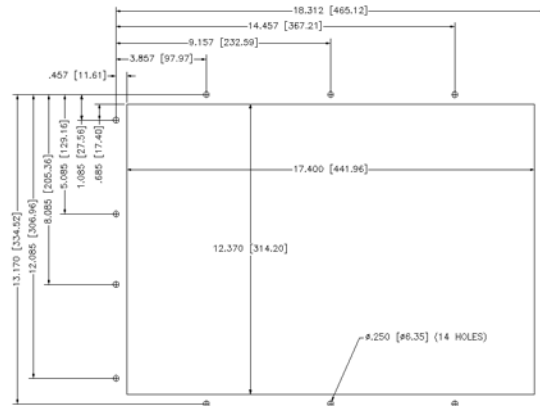
4612KPM(T) Cutout



4615T Cutout



4615KPM(T) Cutout



PRODUCT SPECIFICATIONS

Environmental

	Operating	Nonoperating
Thermal	0°C to 50°C	-20°C to 60°C
Humidity	20% to 80% RH, noncondensing	20% to 80% RH, noncondensing
Shock ^a	15g peak acceleration, 11 msec duration	30g peak acceleration, 11 msec duration
Vibration	.006" peak to peak displacement	.015" peak to peak displacement
5-2000 Hz ^a	1.0g maximum acceleration	2.5g maximum acceleration
Altitude ^b	Sea level to 10,000 ft.	Sea level to 40,000 ft.

^a These values are with solid state hard drives and not rotating media drives.

^b Consistent with internal component specifications.

Electrical

Power Supply 250 Watt AC

AC Power 100-240 VAC, 50-60 Hz,
4612 - 78 Watt nominal power † **4615** - 88 Watt nominal power †

Available Expansion Power
 +3.3V 4.0A maximum
 +5V 4.0A maximum
 -5V 160mA maximum
 +12 3.0A maximum
 -12 240mA maximum

† Nominal power is measured for a base configuration only. Any additional expansion and/or devices will increase the input power required.

PRODUCT RATINGS

Compliance

Regulatory Compliance

CE

- EN 55022: Class A
- EN 61000-6-2
- EN 61000-3-2, Class A
- EN 61000-3-3
- IEC 60950-1

FCC

- 47 CFR, Part 15, Class A

Safety Agency Approvals

UL

- UL 508 Listed
- UL 1604 Listed ^a

CUL

- CSA-C22.2, #142 Listed
- CSA-C22.2, #213 Listed ^a

^a Class I Division 2, Groups A, B, C, D; Class II, Division 2, Groups F and G; Temp. Code: T6

Front Panel

- NEMA 4/4X/12, IP65



Product certification documentation available at: www.profaceamerica.com/certifications

ORDERING INFORMATION

To create an order number, follow the conventions defined by the example order numbers and product configurations.

Example Order Number

Order Number	Description
4612T-1300-512-DVDW-XP	4612T with Touchscreen front panel, Intel® Celeron® M 1.3 GHz, (512K Cache, 400 MHz bus), 512 MB DRAM, 80 GB minimum Hard Drive, Rear Access DVD R/W, Windows XP operating system, On-board 10/100 and 10/100/1000 BaseT Ethernet, USB, one (8.0" max.) PCI, two (9.0" max.) PCI, and one (9.0" max.) PCI or ISA available expansion slots.
4612	-
Display and Operator Input	
T	12" w/ Touchscreen only
KPM	12" w/ Keypad & Mouse
KPMT	12" w/ Keypad, Mouse, & Touch
CPU	
1300	Celeron M 1.3 GHz, 512K Cache, 400 MHz bus
2000	Pentium M 2.0 GHz, 2M Cache, 533 MHz bus
DRAM	
-512	512 MB DRAM
-1000	1 GB DRAM
-2000	2 GB DRAM
Internal Hard Drive	
Blank	Internal 80 GB (min.) Serial ATA Hard Drive
-ND	No Internal Hard Drive ^a
-DHD	Dual Internal 80 GB (min.) Serial ATA Hard Drives
Rotating Media Drives	
Blank	No Rear Access Media Drive
-DVDW	Rear Access Read/Write DVD-ROM Drive ^b
Floppy	
Blank	No Floppy Installed ^c
-F	Rear Access Floppy Installed
Externally Accessible CompactFlash	
Blank	Nothing Installed
-4GCF	4 GB CompactFlash Installed ^d
Operating System	
-XP	Pre-Activated Windows XP Professional
-2K	Windows 2000 (multi-language)
-NOS	No Operating System loaded

Warranty Information
The 4612 series carries a two-year parts & labor warranty.

^a 4GB CompactFlash option must be chosen when selecting the -ND option. ^b When ordering CDW or DVDW options and No Operating System all required drivers will not be loaded and devices will not function properly. ^c When ordering a unit with no floppy operating system recovery will not be possible without adding an external USB floppy drive. ^d When ordering CompactFlash and no internal hard drive the operating system will be loaded on the CompactFlash. This is not recommended when applications are storing data.

Important Notice for XP configurations: Certain Microsoft® software product(s) included with this computer may use technological measures for copy protection. IN SUCH EVENT, YOU WILL NOT BE ABLE TO USE THE PRODUCT IF YOU DO NOT FULLY COMPLY WITH THE PRODUCT ACTIVATION PROCEDURES. Product activation procedures and Microsoft's privacy policy will be detailed during initial launch of the product, or upon certain reinstallations of the software product(s) or reconfigurations of this computer, or may be completed by Internet or telephone (toll charges may apply).

ORDERING INFORMATION (continued)

Example Order Number

Order Number	Description
4615T-1300-512-DVDW-XP	4615T with Touchscreen front panel, Intel® Celeron® M 1.3 GHz, (512K Cache, 400 MHz bus), 512 MB DRAM, 80 GB minimum Hard Drive, Rear Access DVD-R/W Windows XP operating system, On-board 10/100 and 10/100/1000 BaseT Ethernet, USB, one (8.0" max.) PCI, two (9.0" max.) PCI, and one (9.0" max.) PCI or ISA available expansion slots.

4615 -

Display and Operator Input

T	15" w/ Touchscreen only
KPM	15" w/ Keypad & Mouse
KPMT	15" w/ Keypad, Mouse, & Touch

CPU

1300	Celeron M 1.3 GHz, 512K Cache, 400 MHz bus
2000	Pentium M 2.0 GHz, 2M Cache, 533 MHz bus

DRAM

-512	512 MB DRAM
-1000	1 GB DRAM
-2000	2 GB DRAM

Internal Hard Drive

Blank	Internal 80 GB (min.) Serial ATA Hard Drive
-ND	No Internal Hard Drive ^a
-DHD	Dual Internal 40 GB (min.) Serial ATA Hard Drives

Rotating Media Drives

Blank	No Rear Access Media Drive
-DVDW	Rear Access Read/Write DVD-ROM Drive ^b

Floppy

Blank	No Floppy Installed ^c
-F	Rear Access Floppy Installed

Externally Accessible CompactFlash

Blank	Nothing Installed
-4GCF	4 GB CompactFlash Installed ^d

Operating System

-XP	Pre-Activated Windows XP Professional
-2K	Windows 2000 (multi-language)
-NOS	No Operating System loaded

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Warranty Information

The 4615 series carries a two-year parts & labor warranty.

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For more information

ACCESS

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