

15" Modular Panel PCs



The P1500 and P1501 are extremely compact, yet powerful, flat panel PCs that support a host of features such as multimedia and networking. Their core logic is Pentium-III based and is also available as a fanless CPU system. Both attractive and rugged, they are suitable to be used in commercial and industrial applications

Designed for HMI Applications

The P1500 series' PC-based technology is becoming the standard in industrial and commercial use. Typical applications include:

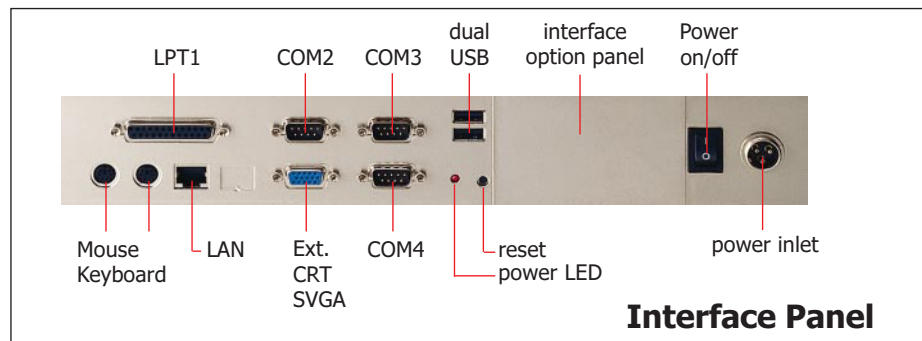
- POS (Point of Sale)
- POI (Point of Information)
- Kiosk Systems
- Gaming Systems
- Medical Systems
- Hospitality Systems
- Banking Systems
- Man-Machine Interface
- Industrial Automation Systems

All-in-one Design

The P1500 series are highly integrated "all-in-one" systems that are well suited for a great variety of applications. Their PC cores consist of Pentium -III based system with CPU speeds of up to 1 GHz.

Both models are equipped with a variety of features to suit a high performance multimedia applications. The core system consists of a high-speed Pentium® III based computer with a 133 MHz front side bus. The 3D graphic controller can support 15" true color LCDs

with XGA resolution to suit 3D applications. The onboard 10/100 Base-T Ethernet networking controller gives the system a high performance link to any network. Onboard industrial strength watchdog timer, power management and monitoring features makes these systems extremely secure and stable to perform round-the-clock in unattended environments.



Advanced Touchpanel Options

Optionally resistive or NFI touchscreen are available. Touchscreens offer the best human machine interface in rough environments where mouse and keyboard are undesirable or cannot be applied.

Resistive Technology :

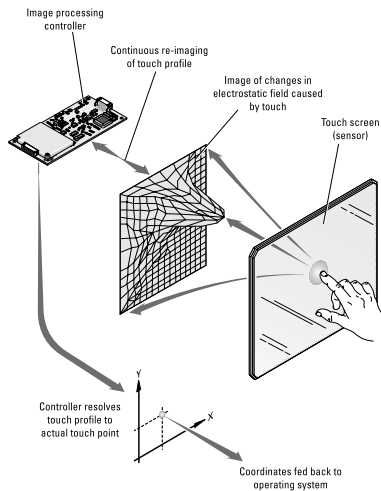
The resistive touchscreen is comprised of a hard-coated, conductive polyester layer that is bonded to a piece of glass. The glass has been coated on one side with indium tin oxide (ITO). These two conductive surfaces are then separated by a layer of tiny transparent "spacers." Much like the action of a simple switch, when a finger touches the screen, the two layers make an electrical connection.

NFI Technology :

The Near Field Imaging (NFI) touchscreen technology uses a sophisticated sensing circuit that detects a conductive object - such as a finger - through a layer of glass, as well as through gloves or other potential barriers that include moisture, gels, and paints.

NFI uses a conductive transparent film pattern in conjunction with a proprietary topology-applied glass base layer. A low-strength electrical waveform is generated across the screen that, when touched by a conductive object, registers positional data.

NFI differs from other conductive-based touchscreen methods in its durability and ability to accommodate gloved hands; therefore, making it well suited for harsh environments.



Multimedia Support

Both models includes a side-mounted slim CD-ROM drive and extensive Audio functions. This makes them perfectly suited for rich multimedia applications. The backpanel has an options window that has space reserved for multiple interfaces such as microphone-in, line-in and speaker-out connectors.

Powerful Networking

Equipped with onboard Intel 82559 Fast Ethernet controller, the series support speedy 100/10Base-T network connection. The Intel® 82559 controller improves performance and reliability by highly integrating functionality and reducing the number of components.

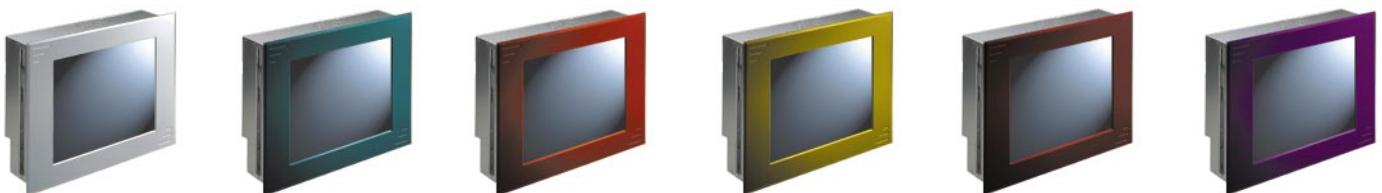
Modular Expansion

The panels modular system approach is a significant advantage since it is easy to service, maintain and upgrade. In addition, the modular LCD, CD-ROM, floppy and hard disk drives can be swapped within no time, further cutting down maintenance time and cost.

OEM/ODM Support

Arbor recognizes customers' demand to tailor their panel PCs' design, versatility, and specifications to fit their needs.

Our Panel PC OEM/ODM team is positioned to deliver extensive support that will meet or exceed their needs from initial design, prototyping, manufacturing at competitive cost, to after sales and service support.



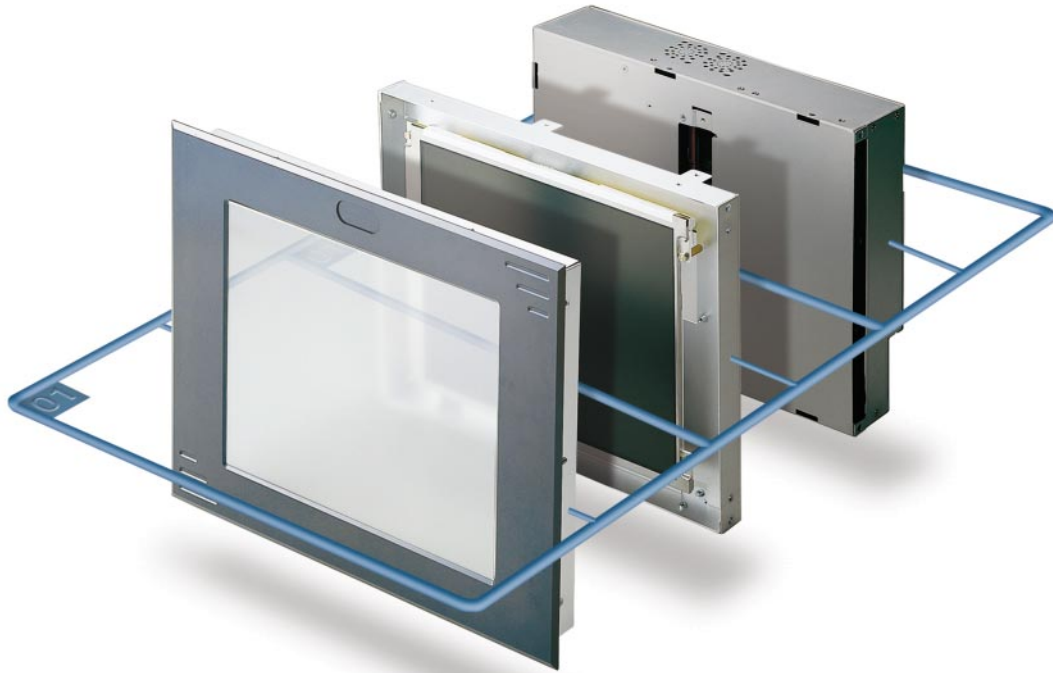
System Basics

Three Parts

The panel pc system consists of three parts :

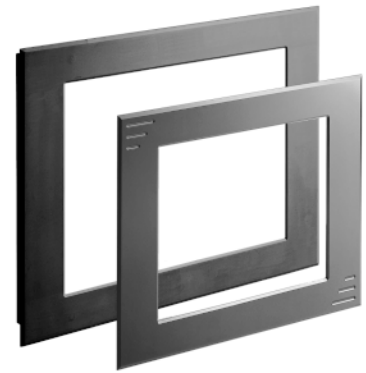
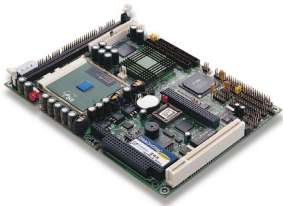
- front bezel
- lcd assembly
- main chassis

This modular approach makes service on the system simple and creates the attractive possibility of adapting the system to a users needs



**Socket 370
Pentium-III up to 1 GHz** or

**Fanless Mobile
Pentium-III Solution**



**Standard 15" B&W and
12.1" OEM bezel**

Embedded Mobile Pentium-III Miniboard LCD/CRT, Fast Ethernet, Audio, 16-bit DIO

- Intel® Pentium® III, Intel® Celeron™ "and VIA Cyrix®III (Joshua) up to 1 GHz
- VIA ProSavage PM133
- 512 MB, PC-133 SDRAM
- 3x RS-232, 1x RS-232/422/485
- 2 ports USB (12 Mb/s and 1.5 Mb/s)
- Flat Panel C&T 69030 with 4 MB
- LAN 10/100 Mbps Intel 82559

Embedded Mobile Pentium-III Miniboard LCD/CRT, Fast Ethernet, Audio, 16-bit DIO

- Mobile Intel® Pentium® III up to 550 Mhz, Mobile Intel® Celeron™
- Intel® 82443 BX chipset with PIIX4E
- 384 MB, PC-100 SDRAM
- 3x RS-232, 1x RS-232/422/485 (w. 5-12 V)
- 2 ports USB (12 Mb/s and 1.5 Mb/s)
- Flat Panel C&T 69030 with 4 MB
- LAN 10/100 Mbps Intel 82559



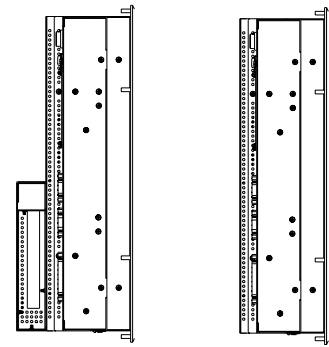
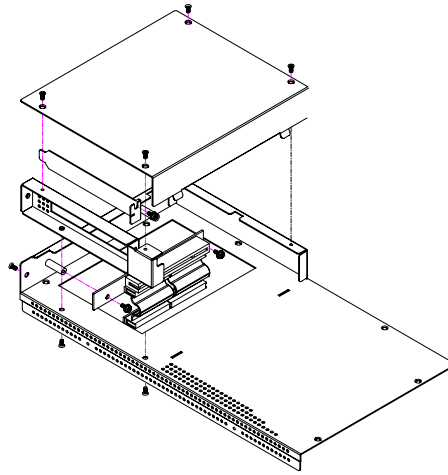
**Select your
own color**

Add-on Card Cage

The backside of the main chassis can be extended to accommodate the addition of a PCI slot kit to allow you to extend your system with one half-size add-on card.

The PCI slot kit consists of a small PCB with PCI connector and a cable that connects to a PCI slot on the system board.

After installing an add on card its bracket connectors are freely accessible from the side of the panel.



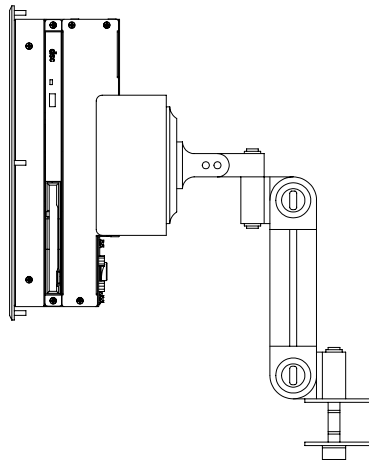
An optional cardcage can be installed with a riser card to accommodate add-on cards

Optional Swing Arm

An optional panel pc arm incorporates effortless height, tilt and rotation adjustment.

Ruggedly constructed from light weight aluminum alloy arm parts with quality surface coating and provision for internal housing of monitor cabling.

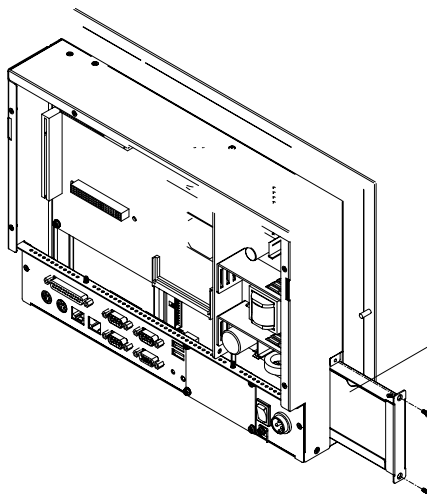
The arms force lift design incorporates knob-less, quiet and smooth dampened operation.



Easy Access to CD / FDD / HDD

All storage devices are mounted in separate assemblies that are easily extracted from the main chassis.

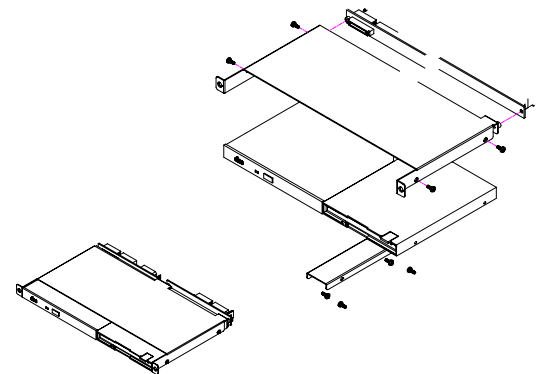
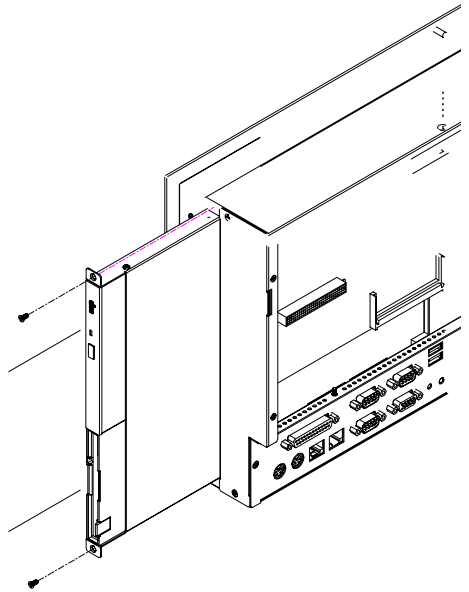
After disconnecting power and two screws, freely accessible from the side of the chassis, signal wiring both assemblies can be extracted.



slim HDD

slim CDROM

slim FDD



15"

Flat Panel PC Comparison



Type		P1500 (white)	P1501 (black)
Construction		Heavy duty steel with NEMA 4/12 & IP65 frontpanel	Heavy duty steel with NEMA 4/12 & IP65 frontpanel
Flat Panel Specifications	Display Type	TFT Color LCD	TFT Color LCD
	Size (diagonal)	15"	15"
	Max. Resolution	XGA (1024 x 768)	XGA (1024 x 768)
	Max. Colors / Grays	262 K	262 K
	Viewing Angle	160 degrees	160 degrees
	Pixel Pitch	0.3075 x 0.3075	0.3075 x 0.3075
	Luminance (cd/m ²)	250	250
	MTBF (hrs)	50,000	50,000
Touchscreen Options		Resistive or NFI type	Resistive or NFI type
System Board Functions look at the connector section to see what functions are actually extended to the backpanel	CPU Level	Intel® Pentium® III, Intel® Celeron™ at 1 GHz	"Fanless" Mobile Pentium-III 500 MHz
	System Memory	512 MB, PC-133 SDRAM on 1 SODIMM	up to 384 MB PC-100 (128 onboard, 256 SODIMM)
	SVGA	C&T 69000 with 2MB on-die SDRAM	C&T 69000 with 2MB on-die SDRAM
	Network	Intel 82559, 10/100 Mbps, autoswitching,	Intel 82559, 10/100 Mbps, autoswitching,
	EIDE	Ultra DMA 100	Ultra DMA 33
	Serial Ports	3x RS-232, 1x RS-232/422/485	3x RS-232, 1x RS-232/422/485
	Parallel Ports	dual port SPP, EPP and ECP	dual port SPP, EPP and ECP
	USB Ports	4 ports USB (12 Mb/s and 1.5 Mb/s)	4 ports USB (12 Mb/s and 1.5 Mb/s)
	IrDA	single port IrDA, 5-pin TX/RX header	single port IrDA, 5-pin TX/RX header
	Audio	16-bit 3D AC'97 Audio controller	ESS PCI AudioDrive ES1938S
	Flash Disk	DiskOnChip 2000 socket	DiskOnChip 2000 socket
	Watchdog Timer	128-level	128-level
	Extensions	PC/104-Plus , PCI-bus	PC/104-Plus , PCI-bus
Add on Cards		one half-size PCI slot on riser card	one half-size PCI slot on riser card
Storage Options	HDD	2½" HDD in HDD cage assembly	2½" HDD in HDD cage assembly
	FDD	optional mounted on CD/FDD assembly	optional mounted on CD/FDD assembly
	CDROM / DVDROM	optional mounted on CD/FDD assembly	optional mounted on CD/FDD assembly
	Flash Disk	either Flash IDE or DiskOnChip up to 288 MB	either Flash IDE or DiskOnChip up to 288 MB
Cooling (fans)		CPU cooler and 2 mini system fans	none, fanless
Connectors on backpanel	Keyboard, Mouse	two 6-pin Mini DIN	two 6-pin Mini DIN
	COM 1/2/3	three 9-pin D-type male	three 9-pin D-type male
	LPT1	26-pin D-type female	26-pin D-type female
	External VGA	15-pin D-type female for external CRT	15-pin D-type female for external CRT
	LAN	RJ-45	RJ-45
	USB	dual port	dual port
	Power, Reset	Centronics, Power LED, Reset switch	Centronics, Power LED, Reset switch
Operating Temperature		0 to 50°C	0 to 50°C
Storage Temperature / Humidity		-20 to 60°C / 5 to 95% non-condensing	-20 to 60°C / 5 to 95% non-condensing
Vibration / Shock		17 to 500 Hz , 1 G PTP / 10 G peak (11 msec)	17 to 500 Hz , 1 G PTP / 10 G peak (11 msec)
Gross Weight		8 Kg	8 Kg
Safety / EMI		CE / FCC Class B	CE / FCC Class B
Stand & Mounting Options		Embedded Wallmount / Desktop Stand / Swing Arm	Embedded Wallmount / Desktop Stand / Swing Arm