

## HERCULES Medical

### MX70 Series

Rev5/7

The **HERCULES Medical** is a high tech modular medicine-PC, which is characterised by its complete sealed housing (IP65). Because of its aluminum housing the IPC is desinfectable and washable and it applies its e.g. in the OP -, airlock area and pure spaces. A further special feature is its fanless operation, which enables it to use it in noise sensitive environments e.g. patients - rooms. The **HERCULES Medical** has a touchscreen for the input of data, which operates also with gloves. Alternatively inputs are possible with keyboard or mouse. The IPC can also be equipped with an integrated keyboard (see picture).

The **HERCULES Medical** corresponds to the **certification of EN60601-1 and EN60601-1-2**. It easily can be configured to meet the customers needs. Type and capacity of processor up to **Pentium® M**, size of RAM and harddisk, type and size of display. According to standard it has USB, 10/100 MBit Ethernet, four serial interfaces, (two galvanic separated), PS/2 connectors for keyboard and mouse, optional free slots for extension and connectors for external floppy and CD drive. Optionally the **HERCULES Medical** can be equipped with a Fiberoptic network card and with a UPS. All this features distinguish the **HERCULES Medical** to be brought into operation in the medical technology. The PC graphic features the **DUAL – HEAD** function, witch allows to increase the workspace of the **HERCULES Medical** with our **HERCULES Medical Monitors**.





## Technical Details MX70 Series

Systemdatas	Processor	Intel Pentium M 1.4GHz	
	FSB	400MHz	
Displays	Chipsatz	Intel 855 GME	
	RAM	max. 1GB DDR-SDRAM SO-DIMM	
	Cache	1MB 2 <sup>2</sup> Level	
	Video Controller	Intel Extreme Graphics 2 with true 2D and 3D acceleration Dual Channel LVDS	
	Video RAM	max. 32MB (UMA)	
	max. resolution LCD	1600 x 1200	
	max. resolution CRT	2048 x 1536	
	Network-Controller	Intel 82562	
	Audio Controller	VIA VT1612A, Soundblaster compatible	
	Operating-Systems	Windows 98, Windows 2000, Windows XP, Windows NT, Linux	
	Touchpanel	integrated high brightness Color-TFT LCD with wide viewing angle; secured with an optical antireflected laminated glas	15" Version: 1024 x 768 Pixel resolution, 16,2 Mio. Colors brighness: 430Cd, contrast ratio 400:1 25ms typ. Reaction time
			17" Version: 1280 x 1024 Pixel resolution, 16,7 Mio. Colors brighness: 280Cd, contrast ratio 1000:1 25ms typ. Response time
			19" Version: 1280 x 1024 Pixel resolution, 16,7 Mio. Colors brighness: 250Cd, contrast ratio 1000:1 20ms typ. Response time
		21" Version: 1600 x 1200 Pixel resolution, 16,7 Mio. Colors brighness: 300 Cd, contrast ratio 1000:1 16ms typ. Response time	
Mass Storage	Harddisk	2,5" automotive Harddisk (up to 40 GB) (-25° to +85°C operating temperature)	
Touchpanel	for 15", 17" and 19" LCD, not available for 21" LCD	analoge resitive Touchpanel with extended transparency (>80%), for temperatures from -20° to +70°, surface hard coated against abrasion	
	Touchcontroller	onboard, connected to a separate port (COM5)	
Mass Storage	2,5" IDE Flashdisk	up to 8GB	
	Floppy-Drive	3,5" Floppy-Drive on USB-Interface	
	CD-ROM	USB CD-ROM Drive external	
	DVD-Drive	USB DVD-ROM Drive external	
	CD- or DVD Burner	external on USB-Interface	
	other storage medias (CF, SD, MMC, ...)	optional on internal PC-Card Slot (2x Typ II) with adapters	



## Technical Details MX70 Series

Interfaces	COM Ports	4x RS232, two galvanical decoupled (COM3 and COM4)
	parallel Port	1x LPT
	USB Ports	2x USB 2.0
	IDE Interface	2x E-IDE
	Keyboard/Mouse	combined PS/2 connector (Y-cable will be delivered with)
	CRT	1x VGA external
Network	RJ45	10/100base-T Ethernet on board
	Wireless LAN (IEEE 802.11b or .11g)	PC-Card WLAN Adapter internal, Dipol-Antenna external with PCI-WLAN Adpater (e.g. Cisco)
Slots	PCI/ISA	1x PCI (PCI 2.1)
	Cardbus	Cardbus Slot 2x Typ II
Mediainterface	MIC-In	Mic-In for Mikrophone connection (e.g. Headset)
	Line Out	Line Out for external speakers
<b>(Option)</b>	Speakers	integrated speakers with appr. 50dBA (in 1m distance)
	Amplifier	integrated stereoamplifier with 2W
Power Supply	Power Supply	internal, fanless 130W power supply
<b>(Option)</b>	UPS (Uninterruptable Power Supply)	internal online UPS for up to 10 min. (depends on system configuration, Battery required) On- / Off-Sequence programmable (e.g. secured switch off)
<b>(Option)</b>	Battery	Blei-Gel Akku with 23Wh; only for 15", 17" and 19" devices at the moment
Foilkeyboard	Systemkeys	On-/Offkey (active only if main key in on, for that no switch on in battery mode is possible)
	Systemindicators	Touchpanel on/off (with LED) Shift-Key for Tastatur (with LED) Backlight on/off Brighness up/down (steps programmable from 2 to 64) Power On (blue) Touchpanel on/off (blue) Harddisk-access (green) Shiftkey for Keyboard (orange) Power Fail (yellow, only with UPS) Battery Low (red, only with UPS)
Housing	Device	manufactured of special Aluminium for fast heat spreading milled from all-Aluminium, thereby exteme warp resistant and extended breakage safety for Touchpanel and laminated glass standard VESA100 mounting easily opening because of flap mechanism, therefore easier to maintain lacquer resistant against all established cleaning and desinfecting materials different VESA adapters for wall- and ceiling-mounting see dimensioned sketch
	Mounting Size Weight	15": 10kg ; 17": 11,2kg; 19": 14kg; 21": 15,5kg
Environment conditions	Operating-Temperature	0°C to +40°C
	Storage-Temperatur	-10°C to +60°C
	Humidity (Operating) Humidity (Storage)	10% to 90% relative humidity (not condensing) 5% to 95% relative humidity (not condensing)
Certificates		CE Certificate of Conformity
	proofed on: Medical Directive 93/42/EEC	EN60601-1 (1990) + A1 (1993) + A2 (1995) + A12 (1993) + A13 (1996) + Cirrigenda (July 1994), IEC 60601-1 (2 ed 1988) + Amend. 1 (1991) + Amend. 2 (1995) + Corrigendum (1995) EN60601-1-2 /1993 EN61000-3-2 /1995 /A1: 1998 /A2: 1998 EN61000-3-3 /1995

## Sizes MX70 Series

Zentrale  
PENTA GmbH  
Lindberghstrasse 7  
D - 82178 Puchheim

Niederlassung Düsseldorf  
PENTA GmbH  
Am Ideck 28  
D - 42781 Haan

Niederlassung Berlin  
PENTA GmbH  
Jagowstrasse 17  
D - 10555 Berlin

Niederlassung Stuttgart  
PENTA GmbH  
Steinbeisstrasse 12  
D - 73037 Göppingen

Niederlassung Deggendorf  
PENTA GmbH  
Ulrichsberger Str. 17  
D - 94469 Deggendorf

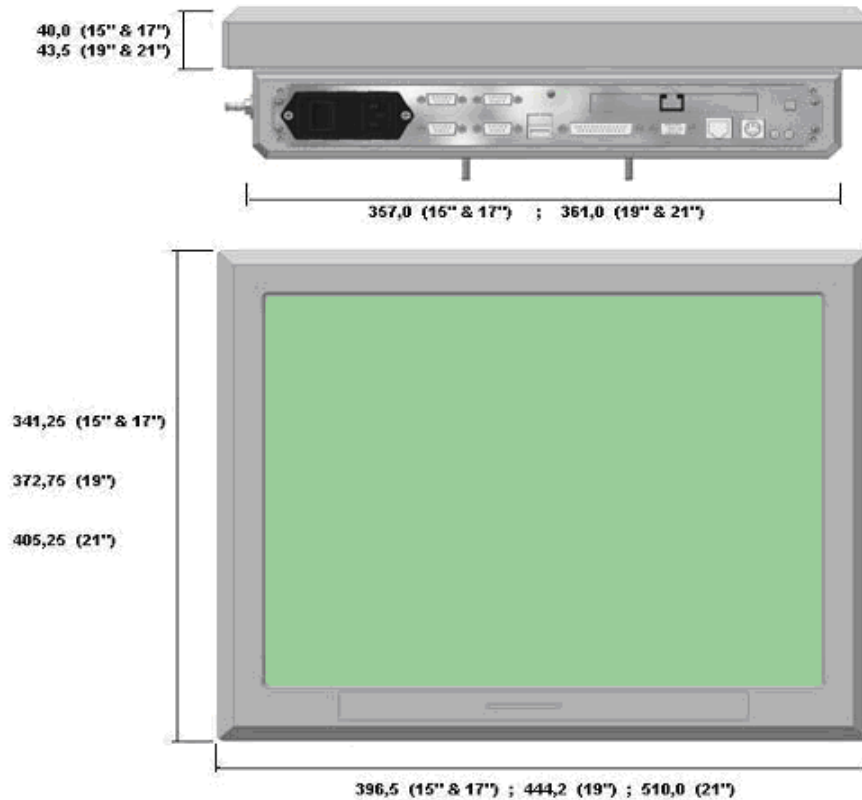
Tel.: +49 (0) 89 / 8007220  
Fax: +49 (0) 89 / 80072228  
info@penta.de  
www.PENTA.de

Tel.: +49 (0) 2129 / 379780  
Fax: +49 (0) 2129 / 379783

Tel.: +49 (0) 30 / 39833874  
Fax: +49 (0) 30 / 39833876

Tel.: +49 (0) 7161 / 6587339  
Fax: +49 (0) 7161 / 6587340

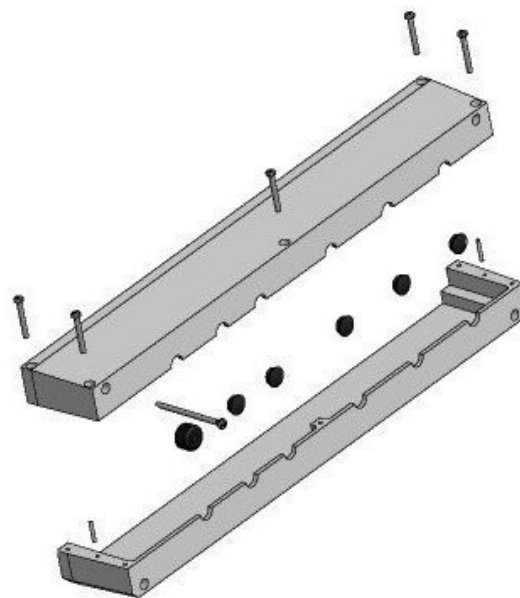
Tel.: +49 (0) 991 / 2909410  
Fax: +49 (0) 991 / 2909429



all Sizes in mm



VESA 100 mounting



cablecover