PACSmate®

Medical Solutions

Monochrome/ Color Medical Display and POC All-in-one Medical Panel PC

Diagnostic Color Monitor

Diagnostic Monochrome Monitor

Modality / Reviewing Color Monitor

All-in-one Medical Panel PC

www.pacsmate.com

Celebrate Humanity with Technology

High-performing, cost-effective and reliable PACSmate medical products including diagnostic monitors, clinical reviewing monitors and all-in one medical panel PCs enable medical professionals to improve the quality of their patient care. All PACSmate medical products are ISO-9001, ISO-14000 and ISO-13485 compliant and are easily applied to a wide range of medical applications.

PACSmate's series diagnostic LCD monitors provide the most stable display quality for digital radiological applications.
The revolutionary GrayBoost® maximizes grayscale precision and guarantees DICOM compliance. This GrayBoost® 12-bit simultaneous grayscale technology is integrated into the entrire PACSmate® series.

PACSmate's clinical reviewing LCD monitors include multiple video interfaces, allowing easy connections with various medical devices. The high-brightness and exceptional contrast ratio brings the best display viewing experience to medical practitioners.

PACSmate's medical panel PCs can transfer medical information securely and in real-time over a high speed network. The all-in-one architecture performs perfectly as a high-performance computing platform. The integrated touch screen makes medical data entry much easier, perfect for medical record terminal platforms.

Trusted Quality Manufacturing

All PACSmate monitors are manufactured with extreme care from panel selection to final calibration. Every aspect of each panel including luminance, viewing angle and chromaticity is carefully inspected. The luminance, the DICOM curve of each selected luminance level and the uniformity of every monitor is calibrated.

Customer Assurance

PACSmate series are applied to the following safety standards, including UL 60601-1, CE(EN 60601-1-2), FCC Part 18, TÜV GM, VCCI, BSMI and CCC.

UL60601-1 FCC Part 18 CE(EN 60601-1-2) BSMI VCCI CCC TÜV GM

PACSmate Product Family

UL60601-1 FCC Part 18 CE(EN 60601-1-2) BSMI VCCI CCC

PACS Diagnostic Application

High-Resolution Monochrome Monitor	MMD-5201M 12-bit 5MP	MMD-3213M 12-bit 3MP	MMD-2213M 12-bit 2MP
LCD Size	20.1"	21.3"	21.3"
Resolution	2560 x 2048	2048 x 1536	1600 x 1200
Max. Luminance	Typical : 850cd/m² Calibrated: 600cd/m²	Typical : 800cd/m² Calibrated: 600cd/m²	Typical : 1000cd/m² Calibrated: 600cd/m²
High-Resolution Color Monitor	**MMD-4300C 30-bit 4MP**	**MMD-3213CH 30-bit 3MP**	**MMD-2213CH 30-bit 2MP**
LCD Size	30"	21.3" Super High Brightess	21.3" Super High Brightess
Resolution	2560 x 1600	2048 x 1536	1600 x 1200
Max. Luminance	Typical : 370cd/m² Calibrated: 250cd/m²	Typical : 800cd/m² Calibrated: 550cd/m²	Typical : 950cd/m² Calibrated: 550cd/m²

Modality/Clinical Reviewing Application

Monochrome Monitor	MMC-2201M	Color Monitor	MMC-2201C	MMC-1190C	MMC-1170C	POCM-1170C
LCD Size	20.1"	LCD Size	20.1"	19"	17"	17"
Resolution	1600 x 1200	Resolution	1600 x 1200	1280 x 1024	1280 x 1024	1280 x 1024
Max.Luminance	700cd/m² (typical)	Max.Luminance	300cd/m² (typical)			

Point-of-Care Application

	Powerful & Fanless	Fanless	High-Performance
All-in-one Panel PC	POC-517A-GM45	POC-415A/417A/419A-915	POC-417B/419B-965
LCD Size	17"	15"/ 17"/ 19"	17"/19"
CPU	Intel® Core™ 2 Duo Socket P (T9400-2.53G / T7500-2.2G)	1.0 GHz Intel® Celeron® M with 512 KB L2 cache (Celeron® M 373)	Intel® Core™ 2 Duo Socket P (T7500-2.2G / Celeron® M 550-2.0G)
Chipset	Intel® GM45 + ICH9M	Intel® 910GMLE + ICH6M	Intel® GME965 + ICH8M
RAM	2 x 2.0 GB (max.) DDR2 SO-DIMM	2 x 1.0 GB (max.) DDR2 SO-DIMM	2 x 2.0 GB (max.) DDR2 SO-DIMM
Power In	DC 12V input	DC 12V Input	DC 12V Input

	Multi-Purpose	With Built-in UPS	
All-in-one Panel PC	POC-3174A-A310	POC-3174B-A320	POC-3174B-A330
LCD Size	17"	17"	17"
CPU	2.0 GHz Intel® Pentium® M 760	Intel® Core™ 2 Duo Socket P (T7500-2.2G/Celeron® M 550-2.0G)	2.0 GHz Intel® Pentium® M 760
Chipset	Intel® 915GM + ICH6M	Intel GME965 + ICH8M	Intel® 915GM + ICH6M
RAM	2 x 1.0 GB (max.) DDR2 SO-DIMM	2 x 2.0 GB (max.) DDR2 SO-DIMM	2 x 1.0 GB (max.) DDR2 SO-DIMM
Power In	AC 110V~240V Input	DC 12V Input	DC 12V Input

2MP
MMD-2213M

3MP
MMD-3213M

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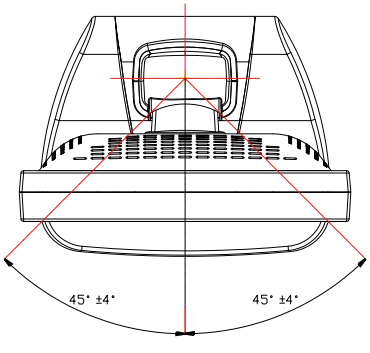
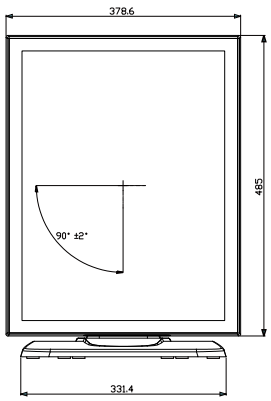
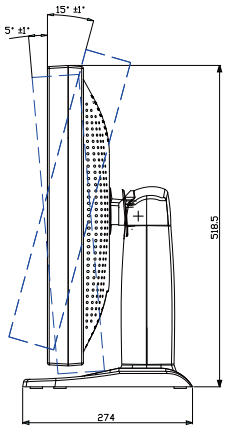
5MP
MMD-5201M

PACSmate®

Monochrome LCD Monitor for PACS Solutions







12-bit

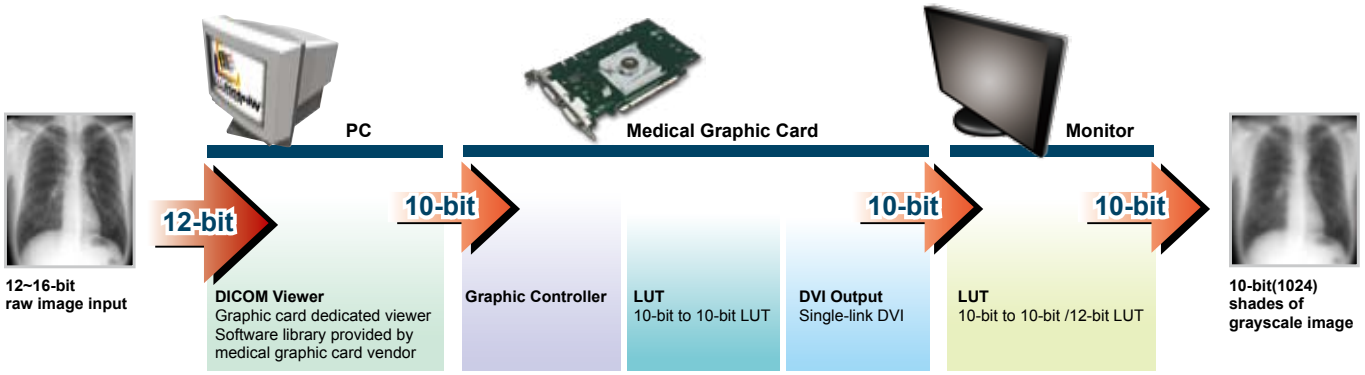
True 12-bit Grayscale Display Solution
PACSmate Revolutionary GrayBoost® Technology

Since most X-ray images acquired from medical modalities are 12-bit or 16-bit, radiologists require monitors that can accurately display these high resolution images. 12-bit grayscale monitors render smoother grayscale display images then traditional 8-bit monitors, providing more accurate grayscale diagnostic images for radiologists to view.

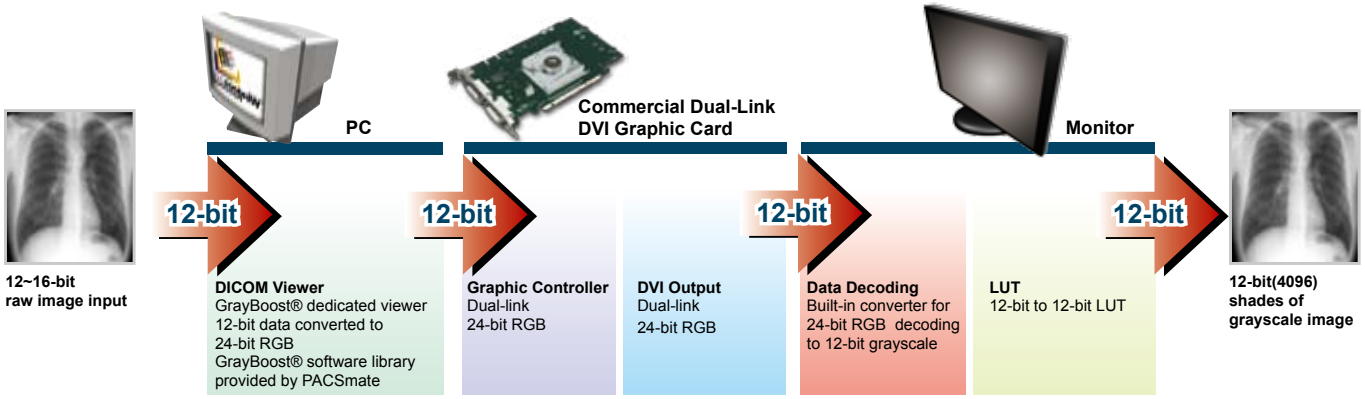
PACSmate GrayBoost® 12-bit Simultaneous Grayscale Technology

The unique PACSmate GrayBoost® 12-bit simultaneous grayscale technology ensures raw image data is retained when the image is displayed on a screen. Unlike the traditional grayscale topology which produces grayscale images with expensive medical graphic cards, PACSmate's innovative GrayBoost® produces grayscale images through the display controller embedded in the monitor, lowering the total cost of ownership. GrayBoost® technology successfully maintains a 12-bit input to 12-bit output data flow to provide the best display results without additional costs. The PACSmate GrayBoost® technology improves diagnostic accuracy by retaining all image details in 4,096 grayscale tones.

Conventional Topology of 10-bit Grayscale



Revolutionary GrayBoost® Topology of 12-bit Grayscale



Benefits of GrayBoost® Technology

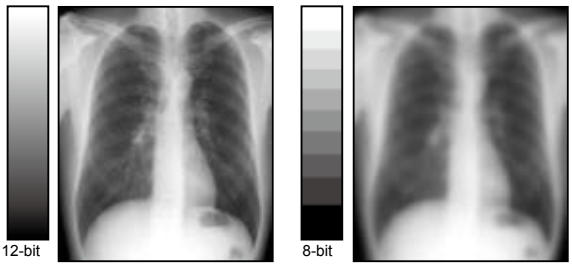
- Precise 4096 tones of simultaneous grayscale by built-in 12-bit to 12-bit Look-Up-Table (LUT)
- DICOM calibrated with 12-bit precision to all selectable luminance levels
- Supports both commercial and medical dual-link DVI graphic cards
- Lowest total cost of ownership for practical 12-bit display solution
- DICOM viewer programming supported by PACSmate with GrayBoost® 12-bit dynamic link library

(PACSmate GrayBoost® is supported with selected 12-bit DICOM viewer software. The GrayBoost® dynamic link library SDK is available for the DICOM viewer software developers.)

Features

GrayBoost® 12-bit Simultaneous Grayscale

12-bit (4096 tones) image input can be all retained in 12-bit (4096 tones) image output via built-in 12-bit LUT. The PACSmate GrayBoost® technology successfully produces 12-bit image data flow through commercial dual-link graphic card, lowering total cost of ownership.



Backlight Stabilizer

The GeniGUARD® built-in backlight stabilizer integrated in PACSmate® monitors automatically calibrates the shift of LCD brightness caused by startup drift, ambient temperature and backlight aging.

GeniGUARD® Backlight Stabilizer

GrayEasy® HDMI™ 1.3 Grayscale Support

The GrayEasy® technology successfully produces a HDMI™ 1.3 compatible, 12-bit grayscale display system without any additional upgrade cost. The built-in 12-bit to 12-bit Look-Up-Table (LUT) for DICOM calibration ensures the quality of grayscale images.

Smart Thermal Control system

PACSmate 5MP monochrome displays feature a smart thermal control system that automatically protects the display from overheating to extend the LCD life. The PACSmate® series monitors are also equipped with smart alert system to keep users informed when abnormal operations of the monitor are detected.

GeniSPOT® & GeniPASS® QC Solution

The GeniSPOT® 3-in-1 calibration system and GeniPASS® QC Utility ensure the display conforms with AAPM, DIN, JIS and IEC standards all the time.

GeniSPOT® DICOM Calibration

Software OSD

The smartOSD is an intelligent and easy to use proprietary On-Screen-Display (OSD) software especially designed for the PACSmate display monitors. It delivers excellent performance and flexibility over hardware OSD solutions in the monitor unit. Users can adjust the monitor with the smartOSD in a Windows ® environment from the remote system instead of adjustment from front panel. The smartOSD allows some functions as below :

- Power on/off
- Graphic card mode selection
- DICOM Look-Up-Table selection
- Luminance selection
- GrayBoost® on/off
- Monitor Information

Uniform Luminance

Uniform luminance is especially critical for diagnostic applications and PACSmate therefore sets a high standard for the uniformity of every medical monitor. PACSmate's special testing equipment ensures every customer gets medical monitors with best uniformity for precise diagnostic results.

Original

PACSmate Factory Calibration

Meets AAPM TG18 & DIN 6868-57 standards

Display Mode Auto-Detection

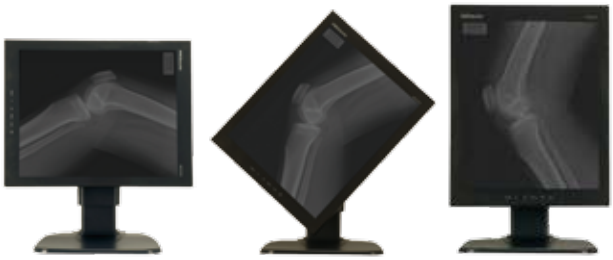
PACSmate's medical monitors have built-in auto-detection technology which identifies different graphic cards automatically and self adjusts the mode fit with the specific graphic card.

Pairing Monitors

PACSmate provides a pair matching service for dual-head display applications, allowing image comparisons for diagnostic practices.

Ergonomic Design

Narrow bezels enable seamless side-by-side viewing for diagnostic applications.



Total Quality Control Solutions

Quality Control is critical to ensure reliability for diagnostic applications. To attain the best image consistency, PACSmate provides the healthcare and IT professionals with GeniSPOT® 3-in-1 calibration system and GeniPASS® QC Utility, which ensures the display conforms with AAPM, DIN, JIS and IEC standards all the time.

GeniSPOT® Calibration System

The reliable USB 2.0 external GeniSPOT® 3-in-1 calibration system maintains display consistency. The GeniSPOT® has a photo sensor to provide precise luminance and DICOM calibration for your periodical QC process. The built-in luxmeter dynamically detects the ambient light of the reading environment and optimizes the monitor luminance. The intelligent self-diagnosis function ensures the GeniSPOT® photo sensor functions perfectly and accurately all the time.

GeniSPOT® External Sensor

- Luminance testing
- DICOM calibration
- Luminance auto-dimming
- GeniSPOT® self-diagnosis
- Five-point testing of uniformity

Ambient light luxmeter for luminance auto-dimming

GeniSPOT® Self-Diagnosis

GeniSPOT® DICOM Calibration

GeniPASS® Remote Management Software

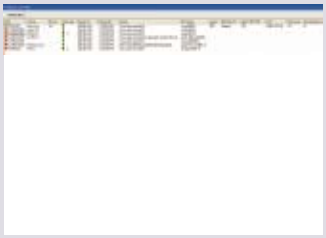
The PACSmate GeniPASS® software enables remote management through the GPRM (GeniPASS® Remote Management) server, including:

NEW

- Group Management
- Schedule Management
- Remote Management
- Monitor Control Management

Monitor Information

PC Information



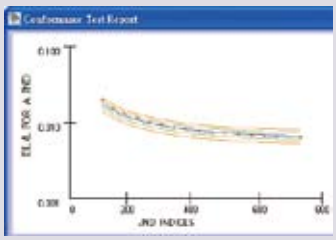
Test Record Management

GeniPASS® QC Utility

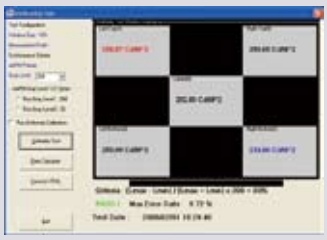
The GeniPASS® QC utility combines with the GeniSPOT® calibration system to provide easy luminance & DICOM calibration. Other GeniPASS® features include acceptance and constancy testing, calibration history management and user defined LUT programming.

GeniPASS® QC software

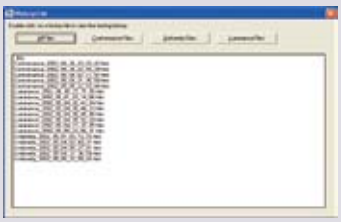
- Luminance testing
- DICOM calibration
- User-defined LUT programming
- Conformance testing
- Five-point testing of uniformity
- Calibration history management



Conformance Testing



Uniformity Testing



History Record Management

Super High Brightess

3MP

MMD-3213CH

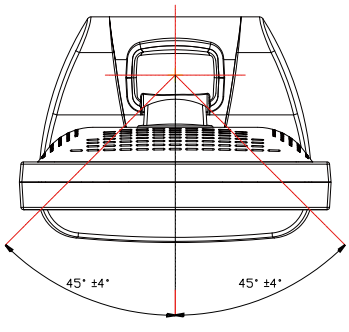
Super High Brightess

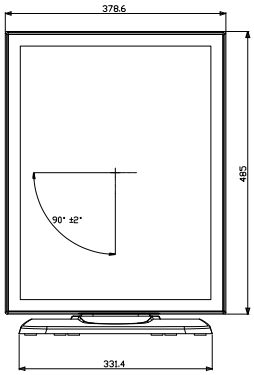
2MP

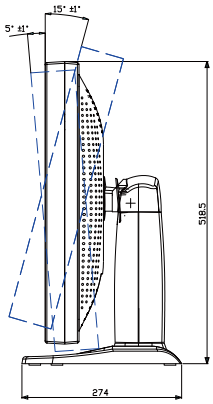
MMD-2213CH

PACSmate®

Color LCD Monitor for PACS Solutions







30-bit

Features

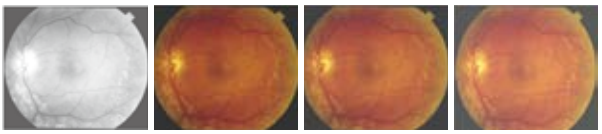
Backlight Stabilizer

The GeniGUARD® backlight stabilizer integrated in the PACSmate® monitors automatically calibrates the shift of LCD brightness caused by startup drift, ambient temperature and backlight aging.

GeniGUARD® Backlight Stabilizer

User Selectable Gamma Settings

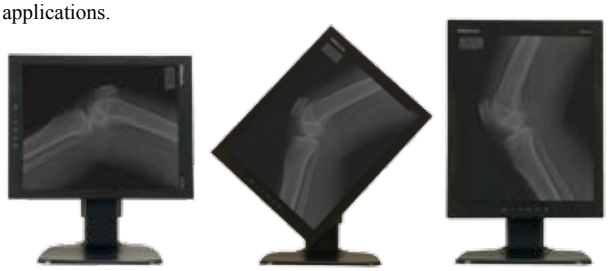
PACSmate's color medical display can be adjusted with Gamma 1.8,2.0,2.2, DICOM and user settings for different brightness conditions to achieve the optimal display quality for images from different modalities.



DICOM | Gamma 2.2 | Gamma 2.0 | Gamma 1.8

Ergonomic Design

Narrow bezels enable seamless side-by-side viewing for diagnostic applications.



Software OSD

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- Power on/off
- Graphic card mode selection
- DICOM Look-Up-Table selection
- Luminance selection
- Color temperature selection
- Monitor Information

Uniform Luminance

Uniform luminance is especially critical for diagnostic applications and PACSmate sets a high standard for the uniformity of every medical monitor. PACSmate's special testing equipment ensures every customer gets medical monitors with best uniformity for precise diagnostic results.

Original | PACSmate Factory Calibration | Meets AAPM TG18 & DIN 6868-57 standards

Pairing Monitors

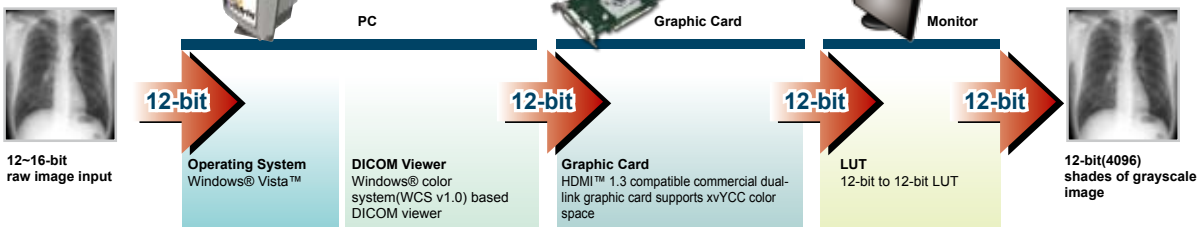
PACSmate provides a pair matching service for dual-head display applications, allowing image comparisons for diagnostic practices.

Color To Grayscale Conversion

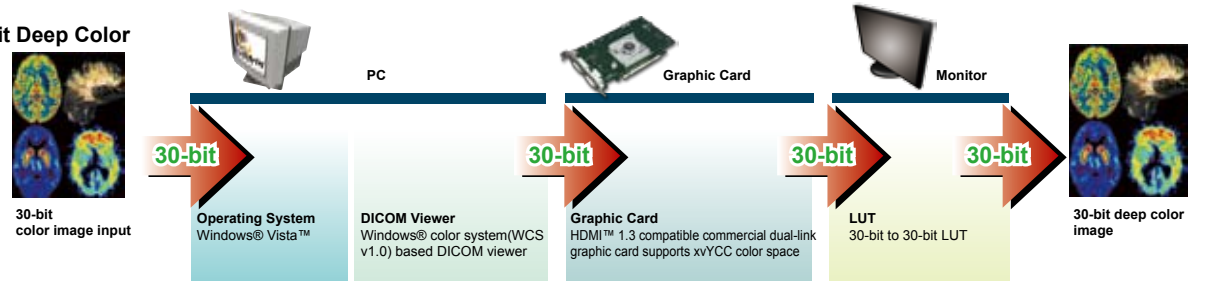
The built-in color-to-grayscale converter reproduces color images as pure grayscale images to achieve more precise grayscale presentation for diagnostic applications.

True 30-bit Deep Color Ready with PACSmate GrayEasy® Technology

GrayEasy® 12-bit Grayscale Display System



GrayEasy® 30-bit Deep Color Display System



Benefits of GrayEasy® Technology

- Supports HDMI™ 1.3 commercial graphic cards for 12-bit grayscale and 30-bit color image processing
- Hardware supports deep color operating systems, such as Windows® Vista™
- Supports deep color compatible DICOM viewer software
- Built-in 12-bit input and 12-bit output Look-Up-Table (LUT) for DICOM calibration in grayscale images
- Built-in 30-bit color dithering for color images
- No extra software programming required
- Supports future Windows® Vista™ based deep color display system without additional upgrade cost

30” Color LCD Monitor for PACS Solutions

4MP MMD-4300C

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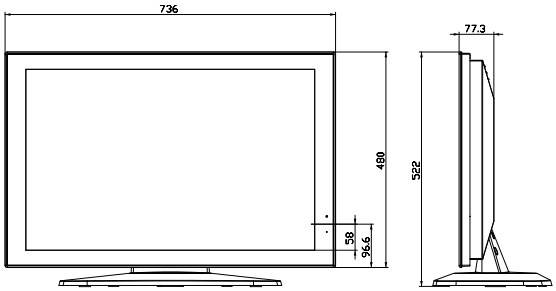


30-bit

Single 4MP viewing mode & Dual 2MP viewing mode Available

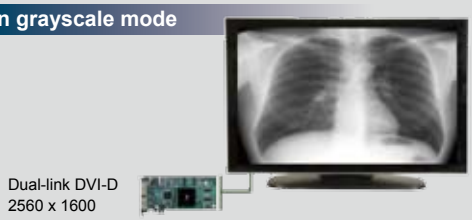
Multiple Viewing Modes & Color-to-Grayscale Conversion Technology

Single Viewing Mode

In single viewing mode, the MMD-4300C is a 4MP monitor in either the color mode or grayscale mode.

Single 4MP in color mode

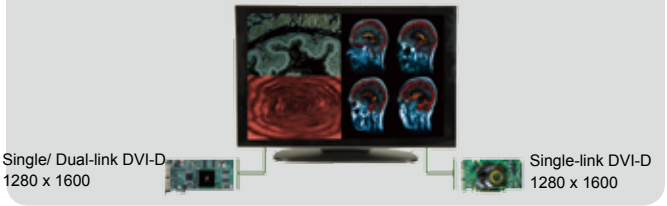
Single 4MP in grayscale mode



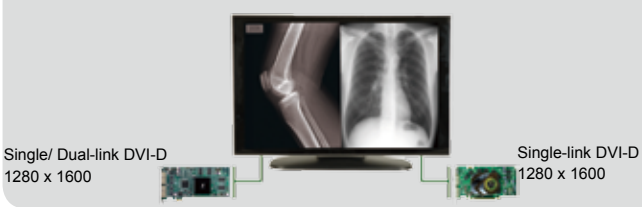
Dual Viewing Mode

Through two DVI signal inputs, the MMD-4300C can be configured to display in a dual 2MP viewing mode. With color-to-grayscale conversion technology, the MMD-4300C can be viewed in multiple modes for side-by-side image comparison purpose. The independent Look-Up-Table for DICOM and Gamma calibration ensures the best display quality for diagnostic applications. The real-time adjustment of multiple display modes can be simply achieved through PACSmate SmartOSD software utility.

Dual portrait 2MP color mode

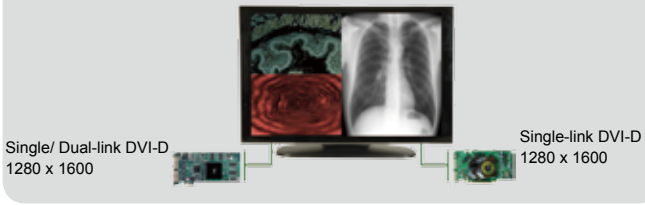


Dual portrait 2MP grayscale mode



Dual portrait 2MP grayscale/color mode

Dual portrait 2MP color/grayscale mode

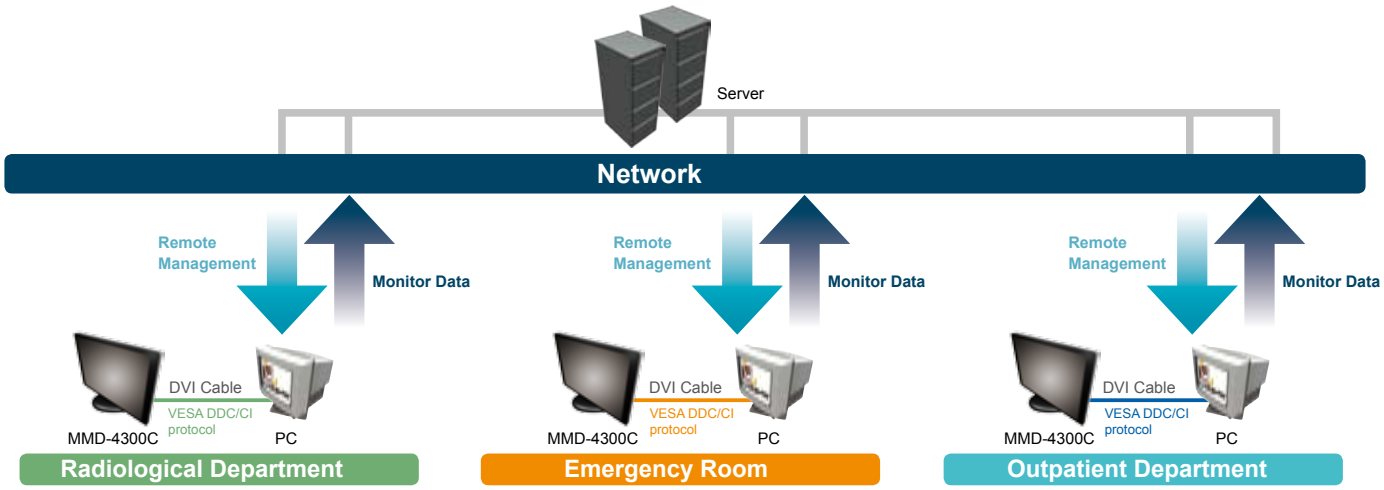


100% Compatible With VESA DDC/CI Protocol

MMD-4300C is implemented with the VESA DDC/CI protocol and the standard VESA Monitor Control Command Set (MCCS). The universal communication interface enables remote control management through a network. The MMD-4300C allows easier two-way communications with the host PC with only a DVI cable. Additional serial or USB cables are not necessary. Through DDC/CI protocol, the software OSD manages MMD-4300C remotely including power mode control, backlight luminance reading and front sensor luminance reading. This reduces the maintenance cost for the end user. PACSmate also provides software OSD customization services with a command library and customer defined MSSC command programming supports for easier software development.

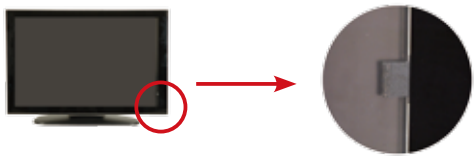
Various software OSD functions:

- Power on/off
- Display mode selection: 4MP/2MP, color/monochrome
- Gamma and color temperature selection
- Luminance selection
- DICOM/ Gamma Look-Up-Table selection
- Monitor Information



Built-in Front Sensor for Continuous DICOM Conformance

PACSmate has designed a built-in, front-mounted sensor which continually monitors the luminance output to ensure consistent images over time.



GrayEasy® 30-bit Deep Color

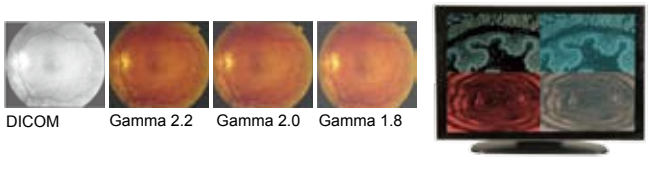
30-bit color image (10-bit for each RGB element) can be displayed on PACSmate® monitors without any image loss. Through PACSmate's unique GrayEasy® technology, it's unnecessary to replace the monitors for future HDMI™ 1.3 supported deep color display capabilities.

IPX2 Compliance

The whole enclosure of MMD-4300C is compliant with IPX2 waterproof standard. The special design for infection control enables MMD-4300C reliably used in critical care environment including the operating room.

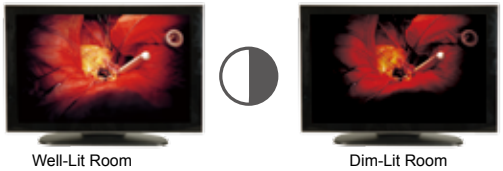
User Selectable Gamma Settings and Color Temperature Settings

PACSmate provides you with flexible Gamma settings and color temperature settings for side-by-side image comparison in dual-viewing modes. The independent Gamma settings (for Gamma 1.8,2.0,2.2) and color temperature settings (6500K, 9300K) consist of multiple user-selectable settings, providing flexible display modes for images from different modalities.

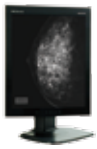


Auto-Dimming for Ambient Light Adjustment

The auto-dimming function helps create better diagnostic experience under proper light condition and extend backlight lifetime



Specifications



TAIWAN EXCELLENCE 2008

Model	MMD-5201M	MMD-3213M	MMD-2213M
Drive system	a-Si TFT active matrix		
Display area (H x V)	399.4 mm x 319.5mm	433.2 mm x 324.9 mm	
Diagnol size of display	51 cm (20.1 inches)	54 cm (21.3 inches)	
Resolution (H x V)	2560 x 2048	2048 x 1536	1600 x 1200
Pixel pitch (H x V)	0.156 mm x 0.156 mm	0.2115 mm x 0.2115 mm	0.270 mm x 0.270 mm
Sub-pixel pitch (H x V)	0.052mm x 0.156mm	0.0705 mm x 0.2115 mm	0.090 mm x 0.270 mm
Pixel format	1 pixel consists of 3 sub-pixels, LCR vertical stripe		
Luminance-max.	850 cd/m²	800 cd/m²	1000 cd/m²
Luminance calibrated-max.	600 cd/m²	600 cd/m²	600 cd/m²
White chromaticity	Wx, Wy=(0.280, 0.304) (typical)		
Contrast ratio	600:1 (typical)	700:1 (typical)	
Viewing angle	Right: 85º, Left: 85º, Up: 85º, Down: 85º(10:1 contrast)		
Response time (Ton+Toff)	30 ms (typical)	35 ms (typical)	
Polarizer surface/hardness	Antiglare/ 2H		
Backlight	12 CCFL	6 CCFL	
Default gamma	DICOM		
Grayscale	Simultaneous 12-bit		
LUT	12-bit input to 12-bit output		
Signal input	Dual link DVI-D (digital)		Single link DVI-D (digital)
USB 2.0 hub	1 upstream/ 2 downstream		
Membrane keypad	Yes		
Power adapter Input voltage range	100VAC - 240VAC		
Power adapter Input frequency range	47Hz-63Hz		
Power adapter Input AC current	1.25A-0.5A		
Power adapter Power output	12VDC, 8.33A, 100W (max)		
Physical dimensions (H x W x D)	With stand: 520 mm x 380 mm x 274 mm (portrait) Without stand: 485 mm x 380 mm x 100 mm (portrait)		
Adjustable height range (with stand)	Portrait: 520 mm~590 mm Landscape: 465 mm~535 mm		
Weight (with stand)	13 kg	13.2 kg	13.2 kg
Operating temperature	10ºC~35ºC		
Storage temperature	0ºC~45ºC		
Operation relative humidity	30% ~75% Non-condensing		
Storage/ Transportation relative humidity	10% ~95% Non-condensing		
Approvals	UL 60601-1, CE(EN 60601-1-2), FCC Part 18, TÜV GM, VCCI, BSMI and CCC		

Ordering Information

5MP	**MMD-5201M**	5 megapixel, 20.1" monochrome LCD monitor includes GeniSPOT® and GeniPASS® calibration kit
3MP	**MMD-3213M**	3 megapixel, 21.3" monochrome LCD monitor includes GeniSPOT® and GeniPASS® calibration kit
2MP	**MMD-2213M**	2 megapixel, 21.3" monochrome LCD monitor includes GeniSPOT® and GeniPASS® calibration kit

Packing List

- PACSmate® Series medical LCD monitor
- Monitor stand
- Power Cord (US x 1, EU x 1)
- Power Adapter
- Dual-Link DVI-D Signal Cable
- USB Cable
- GeniSPOT® USB Calibration Kit
- Utility CD-ROM
  (for user's manual, software utility, and GeniPASS® QC software)

Specifications

Model	MMD-4300C	MMD-3213CH	MMD-2213CH
Drive system	a-Si TFT active matrix		
Display area (H x V)	641.3 mm x 400.8 mm	433.2 mm x 324.9 mm	432.0 mm x 324.0 mm
Diagnol size of display	75.6 cm (30.0 inches)	54 cm (21.3 inches)	54 cm (21.3 inches)
Resolution (H x V)	2560 x 1600	2048 x 1536	1600 x 1200
Display color	16,777,216 colors		
Pixel pitch (H x V)	0.2505 mm x 0.2505 mm	0.2115 mm x 0.2115 mm	0.270 mm x 0.270 mm
Sub-pixel pitch (H x V)	0.0835 mm x 0.2505 mm	0.0705 mm x 0.2115 mm	0.090 mm x 0.270 mm
Pixel format	RGB (Red dot, Green dot, Blue dot) vertical stripe		
Luminance-max.	370 cd/m²	800 cd/m²	950 cd/m²
Luminance calibrated-max.	250 cd/m²	550 cd/m²	550 cd/m²
Contrast ratio	1000:1 (typical)	750:1 (typical)	900:1 (typical)
Viewing angle	Right/Left: 178° Up/Down: 178°	Right: 85°, Le ft: 85°, Up: 85°, Down: 85° (10:1 contrast)	Right: 85°, Le ft: 85°, Up: 85°, Down: 85° (10:1 contrast)
Response time (Ton+Toff)	12 ms (typical)	24 ms (typical)	25 ms (typical)
Polarizer surface/hardness	Antiglare/ 3H	Antiglare/2H	Antiglare/2H
Backlight	16 CCFL	16 CCFL	16 CCFL
Default gamma	Gamma 2.2		
LUT	10-bit for each RGB		
Signal input	Master : Dual link DVI-D (digital) Slave: Single link DVI-D (digital)	Dual link DVI-D (digital)	Single link DVI-D (digital)
USB 2.0 hub	1 upstream/ 2 downstream		
Membrane keypad	Yes		
Power adapter Input voltage range	100VAC-240VAC		
Power adapter Input frequency range	47Hz-63Hz	50Hz-60Hz	50Hz-60Hz
Power adapter input AC current	2.0A max. at 90VAC	1.0A-2.0A	1.0A-2.0A
Power adapter Power output	24VDC, 6.25A,150W(max)	24VDC, 4.6A, 110W(max)	24VDC, 4.6A, 110W(max)
Physical dimensions (H x W x D)	With stand: 522 mm x 736 mm x 266 mm (landscape) Without stand: 480 mm x 736 mm x 76 mm (landscape)	With stand: 520 mm x 380 mm x 274 mm (portrait) Without stand: 485 mm x 380 mm x 100 mm (portrait)	With stand: 520 mm x 380 mm x 274 mm (portrait) Without stand: 485 mm x 380 mm x 100 mm (portrait)
Adjustable height range (with stand)	N/A	Portrait: 520 mm ~590 mm Landscape: 465 mm ~ 535 mm	Portrait: 520 mm ~590 mm Landscape: 465 mm ~ 535 mm
Weight (with stand)	15 kg	13.2 kg	13.2 kg
Operating temperature	10°C~35°C		
Storage temperature	0°C~45°C		
Operation relative humidity	30% ~75% Non-condensing		
Storage/ Transportation relative humidity	10% ~95% Non-condensing		
Approvals	UL 60601-1, CE(EN 60601-1-2), FCC Part 18, VCCI, BSMI and CCC		

Ordering Information

4MP **MMD-4300C**	4 megapixel, 30" color LCD monitor with IPX2 housing
4MP **MMD-4300CX**	4 megapixel, 30" color LCD monitor with IPXX housing
3MP **MMD-3213CH**	3 megapixel, 21.3" color LCD monitor
2MP **MMD-2213CH**	2 megapixel, 21.3" color LCD monitor

Packing List

- PACSmate® Series medical LCD monitor
- Monitor stand
- Power Cord (US x 1, EU x 1)
- Power Adapter
- Dual-Link DVI-D Signal Cable
- USB Cable
- Utility CD-ROM (for user's manual and software utility)

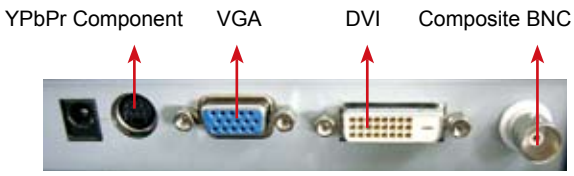
Modality & Reviewing Display

- Multiple video inputs for easy connection with CR, endoscope and ultrasound devices
- User-selectable Gamma settings & color temperature settings for better image viewing quality
- Remote management advantage via software OSD utility
- Medical certified monitor for best reliability
- Cost-effective advantage for diverse reviewing applications

MMC-2201M

20.1” Economical Monochrome Medical Display

- 20.1" monochrome TFT LCD
- 2MP-1600(H) x 1200(V)
- Max. Luminance: 700 cd/m² (typical)
- Smart software OSD control utility
- DICOM calibration
- Portrait/ Landscape orientation



Perfect for PACS Image Viewing Workstation

The MMC-2201M is a cost-effective medical display, perfectly used as a PACS image viewing workstation. The high contrast ratio enables more precise grayscale image from the monitor. The DVI, VGA and composite BNC interfaces make it flexibly connect with diverse medical devices as the reviewing terminal. Compared with commercial displays, the easy portrait and landscape rotation enables a better viewing experience for different medical images. The medical certifications ensure the best reliability when being applied to medical environment.

Image Viewing Advantage

Multiple Video Input Interfaces

The multiple input interfaces on the MMC-2201M enable connection to various medical devices. The multiple inputs include:

- Single-Link DVI-D (digital)
- DB-15 VGA
- Composite BNC (NTSC/PAL)
- Component YPbPr BNC connector
- VGA to BNC

Ergonomic Design

Narrow bezels enable easy side-by-side viewing for diagnostic applications.

User-Friendly Control Advantage

Smart OSD for Easy Monitor Control

The smartOSD is an intelligent and easy to use proprietary On-Screen-Display (OSD) software especially designed for the PACSmate display monitors. It delivers excellent performance and flexibility over hardware OSD solutions in the monitor unit. Users can adjust the monitor with the smartOSD in a Windows® environment from a remote system instead of adjustment from front panel.

The smartOSD allows some functions as below :

- Power on/off
- Luminance/ Contrast setting
- DICOM Look-Up-Table selection
- Monitor information

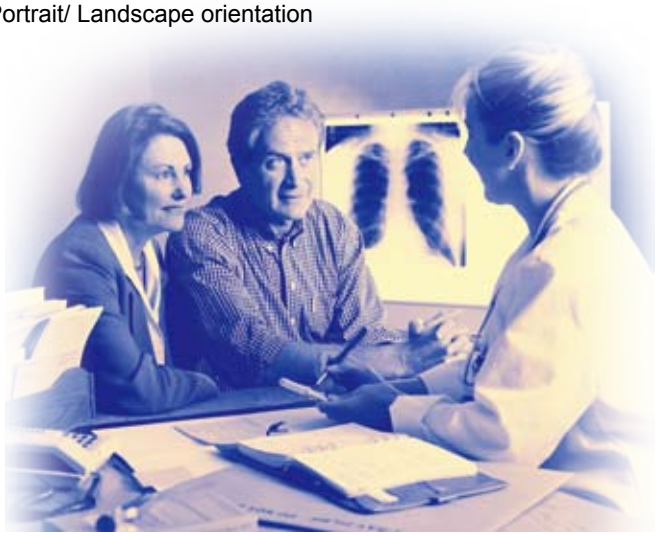
Optional Front Glass Enclosure

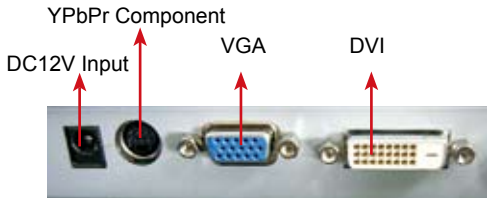
The front panel is enclosed by glass, allowing easy cleaning by the disinfectant without harming the LCD panel.

MMC-2201C

20.1”, 2MP Cost-Effective Color Medical Display

- 20.1" color TFT LCD
- 2MP-1600(H) x 1200(V)
- Luminance: 300 cd/m²
- Smart software OSD control utility
- Selectable Gamma 2.2 and DICOM calibration
- Portrait/ Landscape orientation





Perfect for Clinic Image Viewing Applications

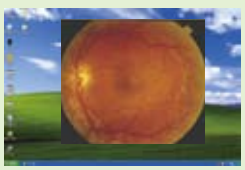
The MMC-2201C is a cost-effective medical display, perfect for image review applications. The DVI, VGA and component interfaces make it perfect for connection with various medical devices. Compared with commercial displays, the easy portrait and landscape rotation enables a better viewing experience for different medical images. The flexible Gamma settings brings the optimal display quality when connected with different medical devices. MMC-2201C is the best image review terminal for CT, MRI and CR devices.

Image Viewing Advantage

User Selectable Gamma Settings

PACSmate's color medical display can be adjusted with Gamma 2.2 and DICOM preset under 6500K color temperature for different brightness conditions to achieve the optimal display quality for images from different modalities.

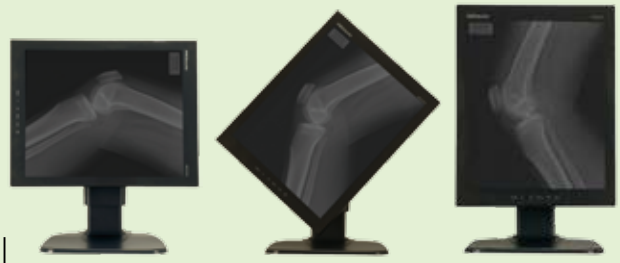
DICOM



Gamma 2.2

Ergonomic Design

Narrow bezels enable easy side-by-side viewing for diagnostic applications.



User-Friendly Control Advantage

Smart OSD for Easy Monitor Control

The smartOSD is an intelligent and easy to use proprietary On-Screen-Display (OSD) software especially designed for the PACSmate display monitors. It delivers excellent performance and flexibility over hardware OSD solutions in the monitor unit. Users can adjust the monitor with the smartOSD in a Windows® environment from a remote system instead of adjustment from front panel.

The smartOSD allows some functions as below :

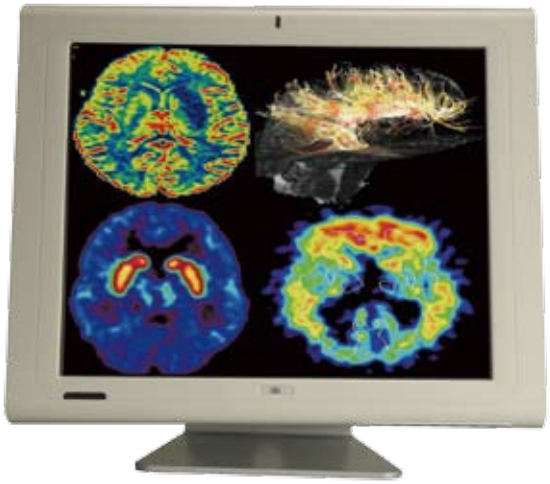
- Power on/off
- Luminance/ Contrast/ Sharpness setting
- Color temperature selection
- Gamma and DICOM Look-Up-Table selection
- Monitor information

Front Glass Enclosure

The front panel is enclosed by glass, allowing easy cleaning by the disinfectant without harming the LCD panel

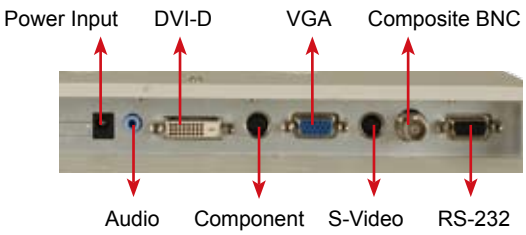
MMC-1170C/1190C

1.3MP Versatile Clinical Review Color Display



* Stand is an optional item

- 17” & 19” color TFT LCD monitor
- Multiple video inputs for connection with various medical devices
- Auto-dimming function for optimized viewing conditions
- Remote control for easy monitor set up
- Picture-in-Picture display function
- Smart software OSD control utility
- Easy OSD keypad control
- Optional touch screen
- IP 65 waterproof and dustproof front bezel



• Component Extend Cable • Component Cable (Component to RCA) • VGA Cable (VGA to BNC) • Component Cable (Component to BNC)

Your Best Display Terminal for Various Modalities

Multiple video interfaces on the versatile MMC-1170C and MMC-1190C enable these systems to be interfaced with VGA, DVI, S-Video, Component and BNC displays. Adjustable color temperature settings make the MMC-1170C and the MMC-1190C perfect for endoscope applications. These systems are also easily interfaced to other advanced medical applications such as ultrasound devices and the 1000:1 high-contrast ratio makes them perfect for viewing C-arm images.

Perfect Image Viewing Terminal

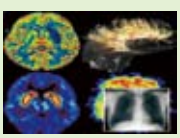
Multiple Color Temperature Settings

A wide range of color temperatures are included in the MMC-1170C and MMC-1190C, including 3600K/4600K/5600K/6500K/7500K. The easy color temperature adjustment ensure the best display quality when viewing images from different modalities.

Picture-in-Picture Function

PIP function enables a second images viewed in a small on-screen window. The Picture-outside-picture can be implemented for image comparison.

Flexible PIP settings:
-Upper left/right and lower left/right of window’s position
-Small, medium and large on-screen windows setting
-Independent brightness and contrast control for PIP windows



Auto-Dimming Function

The built-in ambient light sensor ensures the monitors perform optimally in all light conditions. The auto-dimming function extends backlight life time and provides comfortable viewing environment.

Flexible Control Advantage

Smart OSD Utility

The smartOSD is an intelligent On-Screen Display control.The user-friendly OSD interface under Windows environment enables users to adjust the monitor easily from a remote system.
The smartOSD allows some functions as below:

- Power on/off
- Luminance selection
- Color temperature selection
- Gamma selection
- Monitor information

Full-Function Remote Control Utility

Hot keys on the remote control include PIP zone, input source selection, auto-dimming, brightness and contrast ratio. Remote control ensures easy configuration of the MMC-1170C/1190C.

Best Product Reliability

IP 65 Compliance

The IP 65 front panel is waterproof and dustproof, ensuring the best product reliability.

Paint-coating-free front bezel

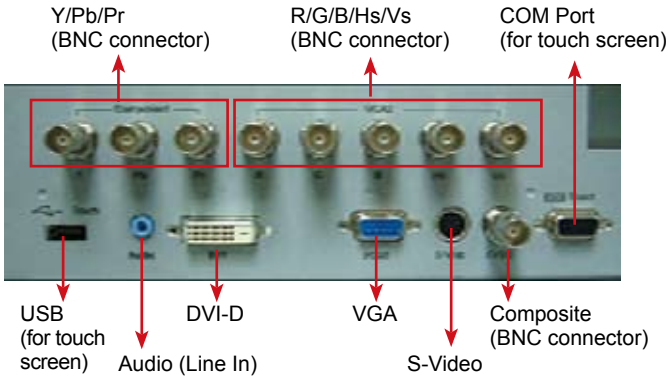
The front bezel has no paint coating, enabling easy cleaning by disinfectant without harming the front bezel.

POCM-1170C

1.3MP Multi-Purpose Color Display

* Stand is an optional item

- 17” color TFT LCD monitor
- Resolution : 1280 x 1024
- Luminance :300 cd/m^2
- Multiple video inputs for connection with MRI and ultrasound devices
- Full OSD keypad design
- Optional touch screen
- IP 65 waterproof and dustproof front bezel



Super Connectivity through Universal BNC Connectors

Universal BNC connectors on the POCM-1170C enable connection to multiple medical devices including CT, MRI and ultrasound devices. Additional S-video, DVI and VGA video inputs allow the POCM-1170C to display CR and ultrasound images. The IP 65 waterproof and dust-proof front panel make the system more reliable and durable than commercial color displays.

Great Image Review Platform

Multiple Video Inputs

The multiple video inputs, including BNC, S-video, DVI, VGA and S-video ensure expanded connectivity with a wide range of medical devices. The multiple inputs make the POCM-1170C perfect to be used as an image review terminal for MRI, CR and ultrasound applications.

1.3MP High Resolution

The POCM-1170C has high resolution, high contrast ratio and a wide viewing angle, bringing the best display quality when viewing medical images. The high brightness design makes POCM-1170C perfect for image viewing purposes as the second display which shows the medical images captured from various medical devices, such as endoscopy, ultrasound and CT.

User-Friendly Advantage

Full OSD Keypad Design

The seven keys on the bottom of the front panel enables easy adjustment of the screen front panel. Users can also check the monitor information over full OSD keypads anytime.

IP 65 Compliant Front Panel

The IP 65 front panel is waterproof and dustproof, enabling implementation in humid areas of the hospital.The screen can also be cleaned with water and disinfectant without harming the LCD screen or causing damage to the system.

Specifications




Model	MMC-2201M	MMC-2201C	MMC-1170C	MMC-1190C	POCM-1170C
LCD size(inch)	20.1	20.1"	17"	19"	17"
Resolution	1600 x 1200	1600 x 1200	1280x1024		1280 x 1024
Max. Brightness (cd/m^2)	700 (typical)	300 (typical)	300 (typical)		300 (typical)
Contrast Ratio	1000 :1 (typical)	800 :1 (typical)	800 : 1 (typical)	1000 :1 (typical)	800 : 1 (typical)
Color Depth	16.7M colors				
Pixel Pitch (mm)	0.255 (H) x 0.255 (V)	0.255 (H) x 0.255 (V)	0.264(H) x 0.264(V)	0.294(H) x 0.294(V)	0.264(H) x 0.264(V)
Viewing Angle	170°(H)/170°(V)	178°(H)/178°(V)	160°(H)/160°(V)	178°(H)/178°(V)	160°(H)/160°(V)
Touch Screen (optional)	N/A	N/A	Optional resistive 5-wire (RS-232 interface)		
Input Video Signal Connector	1 x Single link DVI-D 1 x VGA 1 x Component (YPbPr) 1 x Composite (NTSC/PAL)	1 x Single link DVI-D 1 x VGA 1 x Component (YPbPr)	1 x Composite (NTSC/PAL) 1 x Component (YPbPr) 1 x S-Video 1 x VGA 1 x DVI-D		1 x S-Video 1 x NTSC/ PAL (BNC connector) 1 x DVI 2 x VGA (D-sub15 type,BNC type) 1 x YPbPr (BNC connector)
Remote Control	N/A	N/A	Auto-dimming & IR remote control function		N/A
Speakers	N/A	N/A	2 x 1~3W AMP		
OSD function	6 x buttons (On/off, Auto, Menu, +,-, Select)	6 x buttons (On/off, Auto, Menu, +,-, Select)	7 x buttons (On/off, Auto, Left, Up, Down, Right, Menu)		
LED function	1 x LED for Power on/off				
Power In	DC 12V in				AC 110V ~240V
Power adapter	Medical Grade, AC 110V~240V to DC 12V				N/A
IP level	N/A		IP 65 on front panel		
Physical dimensions (mm) (W x H x D)	With stand: 520mm x 380mm x 274 mm (portrait)		Without stand: 4 28 x 350 x 65	Without stand: 469.94 x 382.46 x 67	Without stand: 434.17 x 374.67 x 123
Adjustable height range (with stand)	Portrait: 520mm ~590 mm Landscape: 465mm ~ 535 mm		N/A		N/A
Operation Temperature	10°C~35°C		0℃~40℃		0℃~40℃
Storage Temperature	0°C~45°C		-20℃~60℃		-20℃~60℃
Safety & EMI	UL60601-1 , EN60601-1 , CCC , CE(EN60601-1-2) , FCC Part 18				
Preset Gamma	DICOM	Gamma 2.2			
DICOM	Meet DICOM standard				
Packing List	1 x Power cord 1 x Power adapter 1 x User manual & Diver CD 1 x DVI cable (Single-Link) 1 x VGA cable (DB-15 to DB-15) 1 x VGA cable (DB-15 to BNC) 1 x Component cable (Mini-Din. to BNC) 1 x Monitor stand	1 x Power cord 1 x Power adapter 1 x User manual & Diver CD 1 x DVI cable (Single-Link) 1 x VGA cable (DB-15 to DB-15) 1 x VGA cable (DB-15 to BNC) 1 x Component cable (Mini-Din to BNC) 1 x Monitor stand	1 x Power cord 1 x Power adapter 1 x User manual & Diver CD 1 x Remote control 1 x Screw set 1 x DVI cable (Single-Link) 1 x VGA cable (DB-15 to DB-15) 1 x VGA cable (DB-15 to BNC) 1 x Component cable (Mini Din to BNC) 1 x Component cable (Mini Din to RCA) 1 x Touch panel RS-232 cable /Touch pen Driver CD (WT-R model only)		1 x Power cord 1 x User manual & Diver CD 1 x Screw set 1 x DVI cable (Single-Link) 1 x VGA cable (DB-15 to DB-15) 1 x Touch panel RS-232 cable / Touch pen Driver CD (WT-R model only)
Optional Mounting Kit	N/A		Wall mount kit: AFLWK-19 ARM: ARM-11-RS, ARM-31-RS STAND: STAND-A19, STAND-B19		Wall mount kit: AFLWK-19 ARM: ARM-31-RS STAND: STAND-300SW-RS

Ordering Information

Ordering Part No.	Description
MMC-2201M	2 mega pixel 20.1" monochrome medical monitor
MMC-2201C	2 mega pixel 20.1" color medical monitor
MMC-1190C	1.3 mega pixel 19" color medical monitor
MMC-1190C/WT-R	1.3 mega pixel 19" color medical monitor with touch screen RS-232 interface
MMC-1170C	1.3 mega pixel 17" color medical monitor
MMC-1170C/WT-R	1.3 mega pixel 17" color medical monitor with touch screen RS-232 interface
POCM-1170C	1.3 mega pixel 17" color medical monitor
POCM-1170C/T-R	1.3 mega pixel 17" color medical monitor with touch screen RS-232 interface

Options

Arms


ARM-11-RS


ARM-31-RS

Wall Mount Kits

AFLWK-19

Stands


STAND-300SW-RS


STAND-A19


STAND-B19

PACSmate Point-of-Care Medical Panel PC

NEW

Super High-Performance

POC-4/B series

- 17”, 19” LCD Size
- Powerful Intel® Core™ 2 Duo CPU & GME 965 chipset support
- Advanced 802.11 a/b/g/n wireless connection

Fanless

POC-5/A Series

- 17” LCD Size
- Powerful Intel® Core™ 2 Duo CPU & GM45 chipset support
- New HDMI and DisplayPort choice
- High-performance & Fanless design
- Side DVD-Combo for image burning purpose

Fanless

POC-4/A Series

- 15”,17”, 19” LCD Size
- Ultra-slim & fanless for easy integration
- Intel® 910GMLE chipset support

Multi-Purpose

POC-3/A series

- 17” LCD Size
- Powerful expansion capabilities
- Reliable IP65 front panel

With UPS Function

POC-3/B Series

- 17”LCD Size
- Powerful Intel® Core™ 2 Duo CPU support
- Built-in UPS for uninterrupted power supply

PACSmate Point-of-Care Medical Panel PC

Medical Image Terminal

Your Best Medical Information Terminal

PACSmate point-of care medical panel PC includes four product segments, the fanless series, the high-performance series, the multi-purpose series and the UPS series. The various screen size can be selected in each product series, optimizing the applications as an information processing terminal. The all-in-one architecture enables the creation of a “paper-less” and “film-less” environment and facilitates the real-time transfer of critical medical records and documentation. The PACSmate point-of-care medical series are your best choice for e-medical applications.

Certified Medical All-in-one Panel PC
EN60601-1 & IEC 60601-1(TUV), CCC, FCC Parts 18, CE (EN60601-1-2), UL60601-1

UL60601-1 CE(EN 60601-1-2) CCC FCC Parts 18 EN60601-1 & IEC 60601-1(TÜV)

Medical Record Platform

Value-Added UPS Advantage

The built-in battery in the POC-3/B series ensures UPS function for medical application, allowing standby power for data backup and management under sudden power shut-down situation. PACSmate unique AUPS software provides the information of current battery status, charging status and percentage remaining, facilitating battery monitoring requirement.

Advanced Technology Innovation

The special thermal design makes PACSmate POC-4/A ultra-slim and fanless, perfect for bedside applications.The unique Intel® Core™ 2 Duo® platform brings the advanced processing power for POC-4/B series.

Medicine Management

Quick Installation Advantage

The PACSmate point-of-care series are full system panel PC with preinstalled CPU,DRAM, and HDD. The all-in-one architecture not only eases installation but also saves space.

Best Product Reliability

The elegant ivory outlook design is perfect for the medical environment. The IP 65 dustproof and waterproof front bezel allows easy cleaning just using disinfectant, and the screen won't be damaged.

Perfect Network Connection

The two Gigabit Ethernet LAN connectors and wireless 802.11a/b/g/n network connections increase redundancy and ensure reliable networks for real-time medical record processing

Medical Cart

Powerful Connection Advantage

The numerous I/O interface design enables perfect connection with various medical devices. The built-in bluetooth module provides a wireless connection to a wide variety of medical peripherals.

User-Friendly Interface

The PACSmate point-of-care panel PC series are designed with a sensitive and reliable touch screen which makes data entry much easier. The user-friendly touch screen makes the POC series a perfect information terminal.

POC-517A-GM45

Fanless & High-Performance All-in-one Medical Panel PC

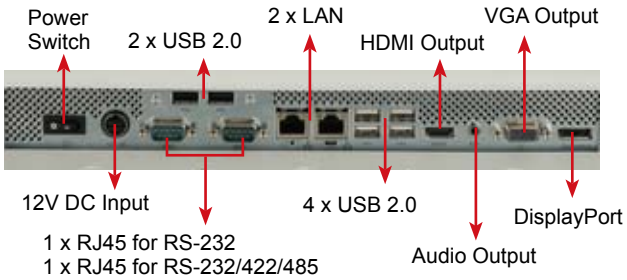
- 17” all-in-one medical panel PC
- Intel® GM45 chipset and Core™ 2 Duo CPU support
- Optical drive for burning images to DVD
- Built-in HDMI and DisplayPort for dual display
- Optional HSDPA module for mobile connection
- One CompactFlash slot for embedded applications
- User-friendly touch screen

* Stand is an optional item

Adapter
DC 12V Power In

The Best Processing Terminal for Surgery

The sophisticated POC-517A is a high-performance processing terminal for electronic healthcare records. The fanless design ensures the most reliable use in a surgery where the environment is critical. The built-in HDMI and DisplayPort bring dual-display advantage for image comparison.The side optical drive enables real-time record and image burning requirement of surgical application. The medical certified emission testing ensures no interruption with other medical devices, allowing the most reliable use, even in critical environments like the operating room.



Superior Heat Dissipation

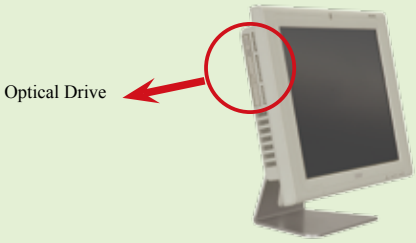
Unique heat sink design for POC-5/A series mechanism allows air to easily flow rapidly through the cooler and reach all the cooling fins.

Powerful Processing Capability

The POC-5/A series are supported by Intel® Core™ 2 Duo processor. The high performance feature enables complex data processing, perfect for 3D image viewing purposel.

Optical Drive for Image burning Advantage

The POC-5/A series has a optical drive at the side of the panel, allowing real-time image burning purpose. The built-in optical drive makes POC-5/A series a perfect image processing terminal.



Bluetooth Module for Perfect Connections

The preinstalled PACSmate bluetooth module provides a wireless connection to a wide range of medical peripheral devices. High speed data transmission through the USB 2.0 interface is perfect for processing patient data.

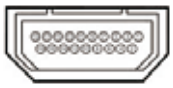
Reliable Touch Screen Design

The POC-5/A series are equipped with reliable 5-wire resistive type touch screen. The touch screen makes medical order entry much easier when used as an information terminal.

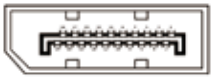
IP 65 Front Panel for Best Reliability

The POC-5/A series are designed with IP 65 dustproof and waterproof front panel, allowing easy cleaning with disinfectant Without harming the panel itself.

New HDMI/DisplayPort Choice



HDMI



DisplayPort

DisplayPort is a digital display interface standard put forth by the Video Electronics Standards Association (VESA). It defines a new license-free, royalty-free, digital audio/ video interconnect, intended to be used primarily between a computer and its display monitor. The new HDMI/DisplayPort on the POC-5/A series enable the connection with the latest video device.

802.11 a/b/g/n ready with invisible antenna

The POC-5/A series systems have two Gigabit Ethernet LAN connectors and wireless 802.11 a/b/g/n network connections, enabling better link quality through accurate network selection. The powerful 802.11 b/g/n/ wireless connection increases redundancy and ensures reliable network for real-time medical record processing.

	802.11a	802.11b	802.11g	802.11n
Data Rate (Mbps)	54	11	54	540
Range (Radius Indoor)	35 Meters	38 Meters	38 Meters	250 Meters
Range (Radius Outdoor)	120 Meters	140 Meters	140 Meters	250 Meters
Radio Frequency	5.15 GHz to 5.85 GHz	2.4 GHz to 2.5 GHz	2.4 GHz to 2.5 GHz	2.4 GHz or 5.0 GHz

27 times faster than 802.11b, no cables or installation fees

Super Connection Advantage

6 x USB 2.0 Ports On the POC-517A

The POC-517A has 6 x USB ports to connect with numerous medical devices and peripherals, such as printers, barcode readers and scanners. The numerous USB ports allow quick processing of electronic medical record, making the POC-517A a perfect information terminal for e-medical applications.

POC-415A-915 / POC-417A-915 / POC-419A-915

Ultra-slim, Fanless All-in-one Medical Panel PC

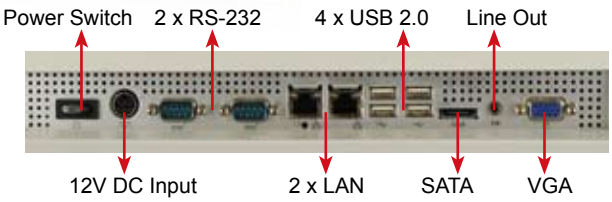
- 15”, 17”, 19” medical panel PC for clinical review applications
- Fanless design with built-in 1.0 GHz Intel® Celeron® M processor
- Ultra-slim type for easy integration
- User-friendly touch screen
- Built-in bluetooth for powerful connectivity
- Network advantage for reliable data transmission

Adapter
DC 12V Power In

* Stand is an optional item

The Reliable Platform for Medicine Management

The ultra-slim type enables easy integration on the wall to process medical information. The fanless design enables noise-free and dust-free advantage when being applied to record medicine information in the pharmacy. The preinstalled bluetooth module provides perfect connection to a wide range of medical peripherals, such as barcode readers and printers. The user-friendly touch screen design makes medical data entry more convenient.



Ultra-Slim Type for Easy Integration

The POC-4/A series are designed with an ultra-slim outlook and a thickness of 67 mm only. The slim type design makes the POC-4/A Series easier to be mounted on any medical device, such as CT, CR and medical cart, being a platform to process medical information

Fanless Design for Noise-free Applications

The POC-4/A series are fanless all-in-one panel PC with a preinstalled Intel® Celeron® M CPU. The fanless design provides quiet operation when being used as a medical information terminal beside patients.

Bluetooth Module for Perfect Connections

The preinstalled PACSmate bluetooth module provides a wireless connection to a wide range of medical peripheral devices. High speed data transmission through the USB 2.0 interface is perfect for processing patient data.

Reliable Network Connection Advantage

The POC-4/A series have two Gigabit Ethernet LAN connectors and Wireless 802.11b/g network connections, increasing redundancy and ensuring reliable network for real-time medical record processing.

DC Power Input for Mobile Medical Application

The 12V DC power input with external power adapter enables easy integration with mobile medical carts.

Reliable Touch Screen Design

The POC-4/A series are equipped with reliable 5-wire resistive type touch screen. The touch screen makes medical order entry much easier when being used as a recording terminal.

IP 65 Front Panel for Best Reliability

The POC-4/A series are designed with IP 65 dustproof and waterproof front panel, enabling implementation in humid area of the hospital. The paint-coating-free front bezel can be cleaned easily with disinfectant without harming the panel itself.

POC-417B-965 / POC-419B-965

Super High-Performance All-in-one Medical Panel PC

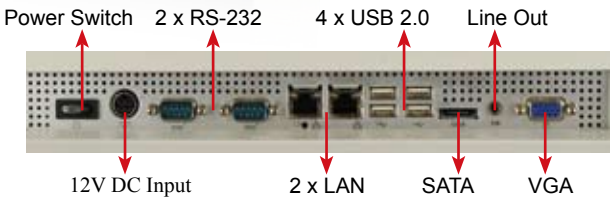
- 17”, 19” medical panel PC for clinical review applications
- High performance Intel® Core™ 2 Duo® CPU support
- User-friendly touch screen
- Advanced 802.11a /b/ g/ n wireless network advantage
- Built-in bluetooth for powerful connectivity

Adapter
DC 12V Power In

* Stand is an optional item

The Perfect Bedside Entertainment Terminal

The high-performance Intel® Core™ 2 Duo processor makes the POC-4/B series strong platform for bedside entertainment applications. The 17” and 19” LCD size enables clear display for all information. With the support of Intel® Core™ 2 Duo, the POC-4/B series are able to display superior image quality, perfect for entertainment applications. The strong capability of wireless 802.11 a/b/g/n connection brings more efficient data transmission advantage for bedside applications. The built-in bluetooth provides easy connection with peripheral devices such as headsets, keyboards and mice.



Powerful Processing Capability

The POC-4/B series are supported by Intel® Core™ 2 Duo processor. The high performance feature enables complex data processing, perfect for bedside entertainment applications.

Best Image Display Quality

With the support of Windows® Vista™ operating system, the POC-4/B series have superior image processing capability. The upgraded functions of Windows® Vista™ make data processing more efficient and more secure.

Value-Added Network Connection Advantage

The POC-4/B series systems each have two Gigabit Ethernet LAN connectors and wireless 802.11a/b/g/n network connections, enabling better link quality through accurate network selection. The powerful 802.11 a/b/g/n/ Wireless connection increases redundancy and ensures reliable network for real-time medical record processing

Bluetooth Module for Perfect Connections

The preinstalled PACSmate bluetooth module provides a wireless connection to a wide variety of peripheral devices, including headsets, keyboards and mice. High speed data transmission through the USB 2.0 interface is perfect for data processing.

Reliable Touch Screen Design

The POC-4/B series are equipped with reliable 5-wire resistive type touch screen. The touch screen makes medical order entry much easier when used as an information terminal.

IP 65 Front Panel for Best Reliability

The POC-4/B series are designed with IP 65 dustproof and waterproof front panel, allowing easy cleaning with disinfectant Without harming the panel itself.

POC-3174A

Multi-Purpose All-in-one Medical Panel PC

- 17” all-in-one medical panel PC
- Multiple I/O design for super connectivity with medical peripherals
- Various expansion slots for powerful upgrade advantage
- Advanced 802.11a /b/ g/ n wireless network advantage
- IP 65 dustproof and waterproof front panel
- User friendly touch screen

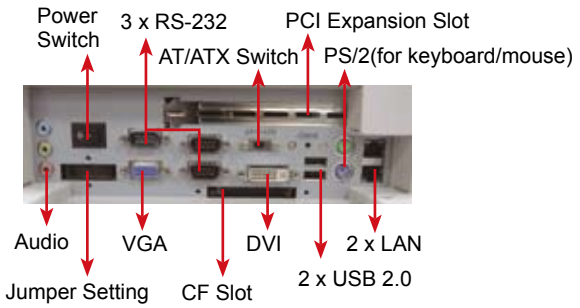
Multi-Purpose

AC Power In

* Stand is an optional item

The Perfect Medical Image Terminal

The sophisticated, high-performance POC-3174A medical image terminal is easily interfaced to critical peripheral patient care devices including CR,CT and MRI devices. The PCI expansion slot is available for video capture card which converts medical images to digital files from various modalities. An optical drive makes the POC-3174A a great printing and CD-burning terminal for PACS applications. The VGA and DVI output interfaces enables a second display for multi-screen image reviewing. The dual Gigabit Ethernet LAN provides reliable real-time image transmission with PACS and RIS workstation. The sensitive touch screen is designed for easy medical order entry.



Powerful Expansion Advantage

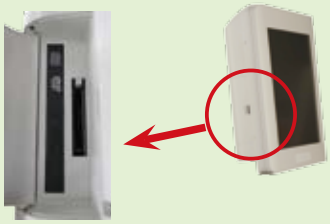
The POC-3174A has a PCI slot and an Express Card/54 slot, allowing powerful system expansion capabilities. The expansion slots enable easy connection with video capture cards, communication modules and card reading modules.

Super Connectivity

The POC-3174A supports numerous I/O interfaces, enabling connections with medical devices, such as RFID readers, barcode readers and blood sugar meters. The POC-3174A is a perfect medical information terminal.

Optical Drive for Image burning Advantage

The POC-3174A has a optical drive at the side of the panel, allowing real-time image burning purpose. The built-in optical drive makes POC-3174A a perfect image processing terminal.



Optical Drive and Express Card Slot

Value-Added Network Connection Advantage

The POC-3174A has two Gigabit Ethernet LAN connectors and wireless 802.11a/b/g/n network connections, enabling real-time and reliable medical image transmission for PACS applications.

Wireless 802.11 a/b/g/n

Reliable Touch Screen Design

The POC-3174A is equipped with reliable 5-wire resistive type touch screen. The touch screen makes medical order entry much easier when used as an information terminal.

IP 65 Front Panel for Best Reliability

The POC-3174A is designed with IP 65 dustproof and waterproof front panel, allowing easy cleaning with disinfectant without harming the panel itself.

POC-3174B

Medical Panel PC with UPS Function

- 17” all-in-one medical panel PC
- High performance Intel® Core™ 2 Duo® CPU support
- Built-in battery for UPS function
- Smart AUPS battery monitoring utility
- Network remote management advantage
- User-friendly touch screen

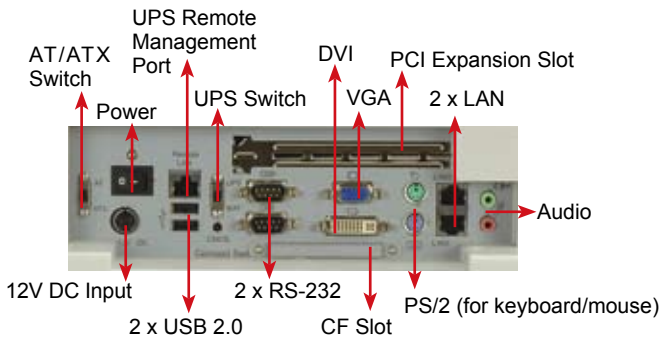
* Stand is an optional item

Battery
-Type: Li-Ion 4S2P
-Normal Voltage: 14.8V, 3800mAH
-Backup: 100W/10min

Adapter
DC 12V Power In

The Best Integration with Medical Cart

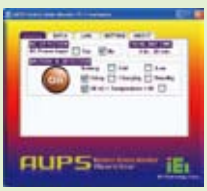
The built-in battery provides the UPS (Uninterruptible Power Supply) function, ensuring the POC-3174B reliably used for medical cart application. The built-in battery allows standby power for data backup and management under sudden power shut-down situation, increasing redundancy for real-time medical record processing. The unique AUPS software facilitates real-time battery monitoring requirement. The network remote management software enables power control for each terminal POC-3174B from a central station, reducing the maintenance cost for the end user.



Power Management by UPS Function

The built-in Li Ion battery provides power backup during power disruptions, keeping costly and valuable data safe. The smart AUPS software allows the below battery monitoring functions:

- current power source
- battery status
- charging status
- battery life monitoring



Value-Added Network Connection Advantage

The POC-3174B has two Gigabit Ethernet LAN connectors and wireless 802.11a/b/g/n network connections, enabling real-time and reliable medical record transmission.

Super Connectivity

The POC-3174B supports numerous I/O interfaces, enabling connections with medical devices, such as RFID readers, barcode readers and printers. The POC-3174B is a perfect medical information terminal.

IP 65 Front Panel for Best Reliability

The POC-3174B is designed with IP 65 dustproof and waterproof front panel, allowing easy cleaning with disinfectant without harming the panel itself.

Powerful Expansion Advantage

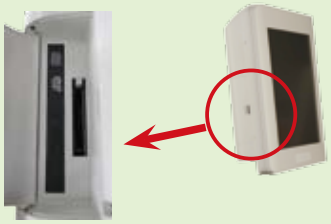
The POC-3174B has a PCI slot and an Express Card/54 slot, allowing powerful system expansion capabilities. The expansion slots enable easy connection with video capture cards, communication modules and card reading modules.

Reliable Touch Screen Design

The POC-3174B is equipped with reliable 5-wire resistive type touch screen. The touch screen makes medical order entry much easier when used as an information terminal.

DVD Writer

The DVD writer on the side panel can be used for writing both DVDs and CDs. High quality images and videos can also be played back using the DVD writer.

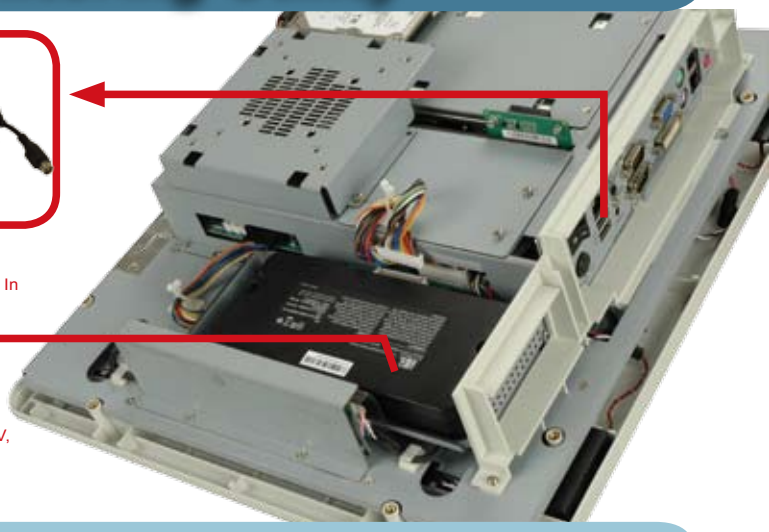


Optical Drive and Express Card Slot

AUPS Battery Monitoring Utility

The remote management LAN provides detailed battery status information over the network, so battery information can be monitored from another computer on the network.

Adapter
-DC 12V Power In



Battery
-Type: Li-Ion 4S2P
-Normal Voltage: 14.8V, 3800mAH
-Backup: 100W/10min

Easy Remote Management

• Network Remote Management Everywhere

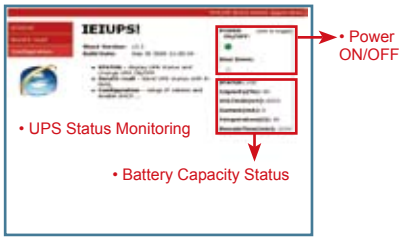
AUPS could setup either static IP address or though DHCP server to get an IP address for the UPS management tool.
User can easily configure the UPS status from anywhere and anytime with networking connection

• Network Remote Management Software

►Board Configuration
Setting IP address and enable DHCP

►Send-E-Mail
Send battery status by e-mail

►Battery Status Monitoring
Display battery information & Remotely control system on/off via web interface



• Easy Management

PACSmate provides software utility and application program for users to easily get the AUPS sub-system real time status and to remotely control system power on/off from anywhere and anytime with internet connection. Remote management software could setup either static IP address or though DHCP server to get an IP address for the management tool.

Click ALARM to get each APUS status via internet

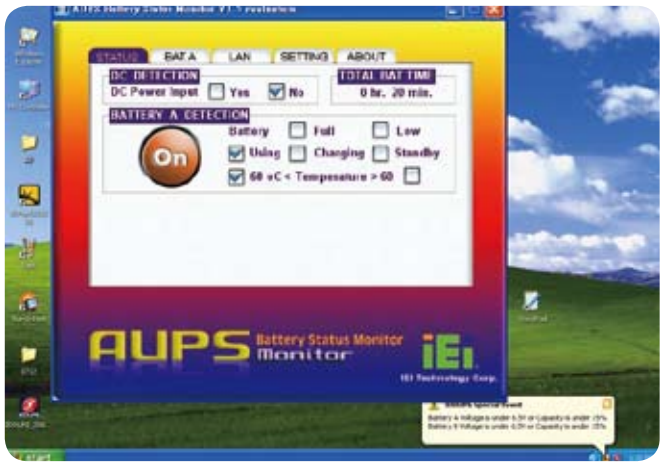
- Board Configuration
- Send E-mail
- Battery Status Monitoring

Easily Control through Remote LAN Connection

Real-time UPS Status Monitoring

• Battery Monitoring Utility

- Monitoring the most critical battery functions on the local machine
The battery monitoring utility allows AUPS status monitoring and provides the ability to change the settings
Uninterruptible Power Systems is a significant product that serves as emergency power when you suffer from electric event

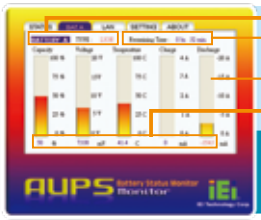


DC Input Detection

Battery Status Detection

AUPS STATUS

• STATUS shows DC / Battery power input detection



Battery Type

Battery Usage Remaining Time

Battery Capacity Bar

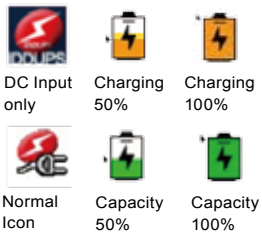
Real-time Information Updating

BATTERY STATUS

• BAT.A shows real-time battery status monitoring

PACSmate Smart Battery Software

- Battery detection
- Battery capacity status
- Battery charge
- DC input indicator
- Battery indicator
- Temperature warning
- Low battery alarm
- Connection port status



LAN CONFIGURATION

• LAN shows system IP address information

Auto Shutdown

Auto-Scan Connection Port

System Shuts Down Condition by Battery Capacity Setting

SETTING

• SETTING shows connection detection port

In addition, the utility software provides the following functions:

- Current power source
- Battery status
- Charging status
- Percentage remaining

LED Signal Table			
	LED 1	LED 2	LED 3
Color	Green	Yellow	Orange
Function	Power Input	Charger Status	Battery Status
Dark	DC Power Out	N/A	N/A
Light	DC Power In	Discharging	Battery Full
Blinking	N/A	Charging	Battery Low

ABOUT

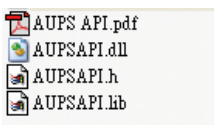
• shows AUPS utility information

Meanwhile, PACSmate also provides AUPS API SDK and command list for customer programming under DOS or Linux system

AUPS API Content

Inti()
AUPS Close()
WriteCommand()
ReadCommand()
Error Code Definition()

AUPS API SDK



AUPS API SDK/Content

Specifications




Model	POC-517A-GM45	POC-415A-915	POC-417A-915	POC-419A-915	POC-417B-965	POC-419B-965	POC-3174A-A310	POC-3174B-A320	POC-3174B-A330
CPU	Intel® Core™ 2 Duo Socket P (T9400-2.53G / T7500-2.2G)	1.0 GHz Intel® Celeron® M with 512 KB L2 cache on-board (Celeron® M 373)			Intel® Core™ 2 Duo Socket P (T7500-2.2G / Celeron® M 550-2.0G)		2.0 GHz Intel® Pentium® M 760-2.0G	Intel® Core™ 2 Duo Socket P (T7500-2.2G/ Celeron® M 550-2.0G)	2.0 GHz Intel® Pentium® M 760-2.0G
Chipset	Intel® GM45 + ICH9M	Intel® 910GMLE + ICH6M			Intel® GME965 + ICH8M		Intel® 915GM + ICH6M	Intel GME965 + ICH8M	Intel 915GM + ICH6M
RAM	2 x 2.0 GB (max.) DDR2 SO-DIMM (system max. 4.0 GB)	2 x 1.0 GB (max.) DDR2 SO-DIMM (system max. 2.0 GB)			2 x 2.0 GB (max.) DDR2 SO-DIMM (system max. 4.0 GB)		2 x 1.0 GB (max.) DDR2 SO-DIMM (system max. 2.0 GB)	2 x 2.0 GB (max.) DDR2 SO-DIMM (system max. 4.0 GB)	2 x 1.0 GB (max.) DDR2 SO-DIMM (system max. 2.0 GB)
LCD Size	17"	15"	17"	19"	17"	19"	17"		
Resolution	1280 x 1024	1024 x 768	1280 x 1024	1280 x 1024	1280 x 1024		1280 x 1024		
Touch Screen	Resistive 5-Wire								
I/O Ports	6 x USB 2.0 2 x RS-232 2 x Giga LAN 1 x Audio 1 x VGA 1 x HDMI 1 x DisplayPort 1 x Power inlet connector	4 x USB 2.0 2 x RS-232 2 x Gigabit Ethernet (GbE) 1 x VGA 1 x Audio (Line-out) 1 x SATA 1 x Power inlet connector			4 x USB 2.0 2 x RS-232 2 x Gigabit Ethernet (GbE) 1 x VGA 1 x Audio (Line-out) 1 x SATA 1 x Power inlet connector		2 x USB 2.0 3 x RS-232 2 x Gigabit Ethernet (GbE) 1 x VGA 1 x DVI 3 x Audio (Mic-in, Line-in, Speaker-out) 2 x PS/2	2 x USB 2.0 3 x RS-232 2 x Gigabit Ethernet (GbE) 1 x VGA 1 x DVI 2 x Audio 2 x PS2 1 x AC Power inlet connector	
Expansion Slot	N/A	N/A			N/A		1 x PCI 1 x Express Card/54 Slot		
Driver Bay	1 x 2.5" SATA HDD 1 x IDE CF card 1 x Slim Type DVD Combo	1 x 2.5" SATA HDD 1 x IDE CF card			1 x 2.5" SATA HDD 1 x IDE CF card		1 x 2.5" SATA HDD 1 x IDE CF card 1 x Slim Type DVD Combo		
Wireless (Mini PCIe interface	802.11 a/b/g/n Intel® 4965	802.11 b/g			802.11 a/b/g/n Intel® 4965		802.11 a/b/g/n Intel® 4965		
Bluetooth (USB interface)	Yes	Yes			Yes		No		
Speakers	2 x 3W AMP	2 x 1.5W AMP			2 x 3W AMP		2 x 3W AMP		
OSD Function	Five bottom panel buttons for LCD on/off , Light + , - , Audio + , -								
LED Function	One front panel Power On/Off LED							Four LED on front panel for System/ Adapter/ Battery/ UPS function	
Power In	DC 12V input						AC 110V~240V input	DC 12V input	
Power Adapter	Medical Grade, AC 100V~240V input to DC 12V output						N/A	Medical Grade, AC 100V~240V input to DC 12V output	
AUPS Function	No	No			No		No	Yes (Battery 3800mAH)	
IP Level	IP65 on front panel								
Operation Temperature	0℃~40℃								
Safety & EMI	UL60601-1 , EN60601-1 ,CCC , CE(EN60601-1-2) ,FCC Part 18								
Dimensions (W x H x D)(mm)	428 x 350 x 76	394 x 309 x 61	428 x 350 x 65	470 x 383 x 67	428 x 350 x 76	470 x 383 x 78	432 x 374 x122		
Net Weight (kg)	7.0	3.7	5.4	6.2	6.6	7.0	8.4	8.5	
Optional Mounting Kit	Wall mount kit: AFLWK-19 ARM : ARM-11-RS, ARM-31-RS STAND: STAND-A19, STAND-B19						ARM : ARM-31-RS STAND: STAND-300SW-RS		

Options

Stands


STAND-300SW-RS


STAND-A19


STAND-B19

Arms


ARM-11-RS


ARM-31-RS

Wall Mount Kits


AFLWK-19

Ordering Information (for POC-517A)

Part No.	Description
POC-517A-GM45-T9400/OD/2GB/80GB	17" fanless medical panel PC, with Intel® Core™ 2 Duo 2.53GHz (T9400) CPU, 2GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 a/b/g/n , Bluetooth, touch screen and AC to DC power adapter, RoHS
POC-517A-GM45-T7500/OD/2GB/80GB	17" fanless medical panel PC, with Intel® Core™ 2 Duo 2.2GHz (T7500) CPU, 2GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 a/b/g/n , Bluetooth, touch screen and AC to DC power adapter, RoHS

Ordering Information (for POC-415A, POC-417A and POC-419A)

Part No.	Description
POC-415A-915-CM373/1GB/80GB	15" fan-less medical panel PC, with 1.0 GHz Intel® Celeron® M 512 KB L2 cache on-board CPU (Celeron® M 373), 1GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 b/g , Bluetooth, touch screen and AC to DC power adapter, RoHS
POC-417A-915-CM373/1GB/80GB	17" fan-less Medical panel PC, with 1.0 GHz Intel® Celeron® M 512 KB L2 cache on-board CPU (Celeron® M 373), 1GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 b/g , Bluetooth, touch screen and AC to DC power adapter, RoHS
POC-419A-915-CM373/1GB/80GB	19" fan-less medical panel PC, with 1.0 GHz Intel® Celeron® M 512 KB L2 cache on-board CPU (Celeron® M 373), 1GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 b/g , Bluetooth, touch screen and AC to DC power adapter, RoHS

Ordering Information (for POC-417B and POC-419B)

Part No.	Description
POC-417B-965-T7500/2GB/80GB	17" medical panel PC, with Intel® Core™ 2 Duo 2.2GHz (T7500) CPU, 2GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 a/b/g/n , Bluetooth, touch screen and AC to DC power adapter, RoHS
POC-417B-965-CM550/2GB/80GB	17" medical panel PC, with 2.0 GHz Celeron® M CPU (Celeron® M 550), 2GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 a/b/g/n , Bluetooth, touch screen and AC to DC power adapter, RoHS
POC-419B-965-T7500/2GB/80GB	19" medical panel PC, with Intel® Core™ 2 Duo 2.2GHz (T7500) CPU, 2GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 a/b/g/n , Bluetooth, touch screen and AC to DC power adapter, RoHS
POC-419B-965-CM550/2GB/80GB	19" medical panel PC, with 2.0 GHz Celeron® M CPU (Celeron® M 550), 2GB DDR2 SO-DIMM RAM, 80GB SATA HDD, wireless 802.11 a/b/g/n , Bluetooth, touch screen and AC to DC power adapter, RoHS

Ordering Information (for POC-3174A and POC-3174B)

Part No.	Description
POC-3174A-A310-PM760/1GB/80GB	17" medical panel PC, with 2.0GHz Pentium® M CPU(Pentium® M 760), 1GB DDR2 SO-DIMM RAM, 80GB SATA HDD, DVD combo, wireless 802.11 a/b/g/n and touch screen, RoHS
POC-3174B-A320-T7500/2GB/80GB	17" medical panel PC, with 2.2GHz Intel® Core™ 2 Duo(T7500) CPU, 2GB DDR2 SO-DIMM RAM, 80GB SATA HDD, DVD combo, wireless 802.11 a/b/g/n , touch Screen, battery 3800mAH and AC to DC power adapter, RoHS
POC-3174B-A320-CM550/2GB/80GB	17" medical panel PC, with 2.0 GHz Celeron® M (Celeron® M 550) CPU, 2GB DDR2 SO-DIMM RAM, 80GB SATA HDD, DVD combo, wireless 802.11 a/b/g/n , touch Screen, battery 3800mAH and AC to DC power adapter, RoHS
POC-3174B-A330-PM760/1GB/80GB	17" medical panel PC, with 2.0 GHz Pentium® M (Pentium® M 760) CPU, 1GB DDR2 SO-DIMM RAM, 80GB SATA HDD, DVD combo , wireless 802.11 a/b/g/n , touch Screen, battery 3800mAH and AC to DC power adapter , RoHS

PACSmate manufacturing facilities are certified as ISO 9001, ISO 14000 and ISO 13485 compliant.

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