# **MUIP-2112**

## 12.5-inch medical touch user interface



- for mobile medical applications
- multi-touch screen
- medically certified

The MUIP-2112 is a smart touch user interface ideal for image-guided therapy in cath labs, hybrid ORs, and for robotic surgical procedures.

#### Full control at the touch of a fingertip

The MUIP-2112 has been designed for use in mobile applications, such as cart-based systems, mobile X-ray and ultrasound. The standard VESA interface allows for easy mounting on carts, arms or booms. Its high brightness and antiglare front glass make it perfect for use in brightly lit areas, such as the operating room or cath lab examination room.

The 12.5-inch touchscreen (featuring P-Cap Multi-Touch technology) ensures intuitive operation of the user interface, even with surgical gloves. The professional optics with excellent contrast ratio and a wide viewing angle make the user interface easy to see and control from any angle.

### Medically certified, fast validation

Barco's MUIP-2112 is engineered to meet the strictest medical requirements and follows the latest design specifications. The fanless design reduces the spread of dust and germs. In addition, the display is rated IP-54 at the front and IP-x3 at the back so it can be cleaned and handled with no need to worry about hygiene or safety.

Built according to the most stringent protocols, the MUIP-2112 allows for rapid validation

of the device within any medical system. The display can be connected to medical imaging systems via an Ethernet cable or a WiFi interface.

• anti-glare glass front screen





MUIP-2112 Barco



- P-Cap Multi-Touch technology
- Fanless design
- VESA 75 mounting interface
- Ultra low power CPU board
- Modular and versatile CPU platform
- Protected front (IP54) and back (IP21)

PRODUCT SPECIFICATIONS	MUIP-2112	
System specifications		
CPU	Intel Atom N2930 Quad Core	
CPU Speed	1.83GHz	
RAM Size	4 GB	
SSD drive	32 GB	
Motherboard	Form Factor : Q7 Kernel Board	
Operating system	Windows 10 IoT	
Display		
Screen size	12.5inch (diagonal)	
Active area	276.5mm x 157.5mm	
Resolution	1920 x 1080	
Maximum brightness	400cd/m2 (typical)	
Contrast ratio	1000:1 (typical)	
Color chromaticity -white	x=0.305; y=0.320 (typical)	
Viewing angle	± 80° (H & V, minimum)	
Color depth	3 x 6-bit (256k colors)	
Touch screen	Type: P-Cap multitouch (10 touches)	
Screen surface treatment	Anti Glare (Gloss 50)	
Screen assy structure	Optically bonded panel+touchscreen+glass	
Connectivity and controls		
Interfaces	I/O Interfaces (in the connectore bay):  2 x Gbps wired LAN (RJ-45)  1 x USB 3.0 (USB Type-A)  1 x USB 2.0 (USB Type-A)  1 x miniDP++ Video OUT (max 2560x1600@60Hz)  1 x Microphone IN (3.5mmm Jack)  1 x Audio Line OUT (3.5mm Jack)  1 x DC Power IN (5mm Jack)	
Internal IO Expansions	1 x M.2 Key E type 2230 (for optional WiFi card) 1 x M.2 Key E type 2230 (for optional extra SSD)	
Controls	Touchscreen (for use also with surgical gloves) Power ON/OFF Button Reset Button (under the connector back-cover)	
Power		
Input voltage	12V <sub>DC</sub> to 24V <sub>DC</sub>	
Battery	Li-ion, rechargeable	
Battery capacity	1980 mAh (7.2V)	
Power consumption	< 1W (stand-by) < 10W (ON, typical, excluding battery re-charging)	
Physical characteristics		
Dimensions	Width	312mm
	Height	200mm
	Depth	37mm
Weight	1.4 kg	

PRODUCT SPECIFICATIONS	MUIP-2112		
Dust-water protection	Overall	IPx3 (with standard connector cover)	
	Front Face	IP54	
	Overall	IP54 (with sealed connector cover)	
Brand	Barco		
Color	Plastics	RAL 9003 (Textured MT11010 Surface)	
	Glass Rim	RAL 9004	
Accessories			
Included in the package	Standard Connector Cover AC/DC Power Adapter (In 100-240VAC; Out 19 VDC) EU Power Cord US Power Cord User Guide (English)		
Optional accessories	Desktop Stand Country-specific Power Cords		
Optional configurations*			
Extended RAM Size	Up to 8GB		
Extended SSD Size	Up to 64GB	Up to 64GB	
Additional SSD	(M.2 Separate Disk): M.2 Key E Type	(M.2 Separate Disk): M.2 Key E Type 2230 Module (any capacity)	
WiFi	M.2 Key E Type 2230 802.11n Module		
Battery	Batteryless Version: No Battery included		
Full IP54 version	With sealed connector cover (OEM cabling required)		
Alternate Q7 kernel boards	To be agreed upon on a project basis		
Operating systems	Windows 7 Embedded (Alternate)	Windows 7 Embedded (Alternate)	
*Note	These optional configurations can be	These optional configurations can be supplied on a project basis. MOQ may apply.	
Environmental conditions			
Temperature	Operating	+10°C to +35°C (with Battery) +0°C to +40°C (without Battery)	
	Storage	-20°C to +60°C	
Humidity	Operating	20% to 80% (non condensing)	
	Storage	20% to 95% (non condensing)	
Pressure	700 hPa to 1060 hPa		
Compliance			
Product classification	Medical Device, Class I		
Safety	IEC 60601-1: 2012 Edition 3.1 EN 60601-1: 2006 +A1:2011 +A12: 2 ANSI/AAMI ES 60601-1: 2005/(R)201 CAN/CSA-C22.2 No. 60601-1		
EMC	IEC / EN 60601-1-2: 2014 FCC 47 CFR Part 15 Sub B FCC		
Applied marks	CE, DEMKO, C-UL-US, FCC		
Optional marks	CCC		

#### Last updated: 19 Dec 2018

 $Technical\ specifications\ are\ subject\ to\ change\ without\ prior\ notice.\ Please\ check\ www.barco.com\ for\ the\ latest\ information.$ 

