



# NAVY



RUGGED DISPLAY

## A4RD SERIES

# 17"3 A4RD 5717 HD



### Key Features

- > IP68/NEMA 6P waterproof
- > Full MIL specs qualified
- > Rugged touch screen (glass to glass technology)
- > Optional 12/16 programmable function buttons
- > NVIS capability
- > Flexible positioning of the connectors
- > Optional USB front connector from computer via back connector
- > ROHS compliant

**IRTS 5717HD** is a 17" display of the A4RD Family, a comprehensive range of 10" to 17" rugged and ultra rugged displays.

Its specific design, graphic display and video capabilities meet the evolving and operational needs of modern Armed Forces and cope with the toughest environments.

**A4RD Technology** allows selecting 6 screen sizes (10", 12", 12"W, 15", 15"W & 17"W), brightness level as well as military specs ruggedization according to random vibrations levels: level I up to 3 G RMS (SK1 serie) and level II up to 6 G RMS (SK2 serie).

Direct interface with client system, versatile configuration capabilities and easy mounting make it the choice of prime system integrators as a reliable, configurable, best cost and lead time MOTS (Military Off The Shelf) equipment in operational use today.

See also the displays in the A4RD series specifically designed for your Army or Airborne applications.



## PRODUCT SPECIFICATIONS

Display Module	
<b>Size</b>	17.3"
<b>Resolution</b>	1920 x 1080 (Full HD)
<b>Brightness</b>	300 Cd/m <sup>2</sup> (LED Technology)
<b>Pixel pitch</b>	0.1989 (H) x 0.1989 (V) mm
<b>Viewing angles</b>	85-85 (H) / 85-85 (V)
<b>Response Time</b>	24 ms (Tr+Tf) White to Black
<b>Contrast Ratio</b>	1000:1
<b>Display Color</b>	16.7 M
<b>Dimming ratio</b>	up to 10 Cd/m <sup>2</sup>
<b>Touch screen characteristics</b>	Resistive 5-wire Glass to Glass technology
Controls	
<b>Remote control</b>	Backlight, blackout and On/Off control in front
<b>Additional control capability</b>	3 x free programmable function keys
<b>Option</b>	<b>Additional front control buttons</b> 8 x 2 programmable function buttons
Integrated Video Controller	
<b>Graphic controller</b>	IRTS Embedded Video Controller
<b>Analog Video</b>	1 x input VGA
<b>Digital Video</b>	1 x input DVI
<b>Serial Ports (RS232/RS422)</b>	1 x Serial touch controller / 1x Serial for remote control
<b>USB 2.0</b>	1 x Touch controller / 1 x Remote control
<b>BITE</b>	Unit Management Software
Electrical Features	
<b>Power supply</b>	Power 18/36 VDC with galvanic isolation
<b>PLD</b>	Power Line Disturbance optional module
<b>Power consumption</b>	50 W normal environment cond. 80 W max in cold environment
Physical Features	
<b>Dimensions</b>	460 x 300 x 88 mm
<b>Weight</b>	8.2 Kg
<b>Mechanical fixing</b>	200 x 200 - 4 x M8
<b>Packaging / color</b>	Aluminum / GAM C BLACK 36X3 (Other colors available)
Connectors Types & Position	
<b>Connectors position</b>	UP in standard, DOWN in option
<b>Connectors type</b>	MIL-DTL-38999 III (Black Zinc Nickel) sizes 11 & 13
Options	
<b>Composite Video</b>	1 x Coaxial composite PAL/NTSC (BNC)
<b>Optical bonding</b>	Bonding LCD Panel
<b>Front USB Connector</b>	1 x Fischer serie 102 for connection transfer from CPU (key board, pointing devices, etc.)
<b>Connecteur Caps</b>	Standard on front, optional on the others connectors
Warranty	
Two-year limited warranty (parts and labor), factory return under RMA procedure.	
Additional 2-year coverage and customized service plans available on request.	



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RUGGED ELECTRONICS, COMPUTERS &amp; DISPLAYS

## RANGE OF DISPLAYS

A4RD offers a wide range of displays whose 6 monitor's screen sizes and 2 brightness levels will meet your needs for your indoor and outdoor applications. (Contact us for more information).



A4RD LCD DISPLAYS	10"4	12"	15"	12"W	15"6 W	17"3 W
	XGA			WXGA	HD	HD
A4RD Series	A4RD10 XG	A4RD12 XG	A4RD15 XG	A4RD12 WX	A4RD15 HD	A4RD17 HD
Screen Ratio	4/3			16/10	16/9	16/9
Resolution	1024 x 768			1280 x 800	1920 x 1080	1920 x 1080
A4RD Standard Luminance cd/m <sup>2</sup>	600	700	700	700	400	300
Viewing Angles	85°/85°-85°/85° IPS™	85°/85°-85°/85° IPS™	85°/85°-85°/85° IPS™	85°/85°-85°/85° IPS™	80°/80°- 65°/80°	80°/80°- 60°/80°
A4RD Outdoor Luminance cd/m <sup>2</sup> (option)	700	900	1000	1000	On customer request	On customer request
Viewing Angles	80°/80°- 80°/80°	80°/80°- 80°/80°	80°/80°- 60°/80°	80°/80°- 60°/80°		
Sunlight readability (option)	IRTS bonding technology (applicable to standard & outdoor versions)					IRTS bonding technology (applicable to standard & outdoor versions)

## PRODUCT RANGE

Depending on the application, our range offers products that will comply with your size, ruggedization and environmental conditions requirements.

Surface ships  
Below deck

Surface ships  
Top side

A4RD for Navy		A4RD Range		
		SKU 1	SKU 2	
Display Size	A4RD Series	Rugged Model	Ultra Rugged Model	
10"	10"4 XGA (1024 x 768)	A4RD10 XG	5710 XG SK1	5710 XG SK2
12"	12" XGA (1024 x 768)	A4RD12 XG	5712 XG SK1	5712 XG SK2
	12" WXGA (1280 x 800)	A4RD12 WX	5712 WX SK1	5712 WX SK2
15"	15" XGA (1024 x 768)	A4RD15 XG	5715 XG SK1	5715 XG SK2
	15"6 HD (1920 x 1080)	A4RD15 HD	5715 HD SK1	On customer request
17"	17"3 HD (1920 x 1080)	A4RD17 HD	5717 HD SK1	
Power Supply Characteristics		18-36 VDC		
DC Power Supply		18-36 VDC		
2 Ruggedization Levels		Operating Environmental Conditions		
Operating Temperature Range		Level I	Level II	
Operating		-20°C to +55°C	-32°C to +60°C	
Storage		-32°C to +70°C		
Humidity		T= +40°C, HR = 5 to 95%	T= +60°C, HR = 5 to 95%	
Mechanical		Level I	Level II	
Random vibrations		up to 1g RMS	up to 5,8g RMS	
Sinus vibrations		up to 1.28g	up to 1.28g	
Shocks		30g 11msec half sine X,Y,Z axis	37g 25msec half sine X,Y, Z axis	
EMC/EMI		Level I	Level II	
MIL-STD 461E		Navy applications	Navy fixed & Air Force	



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## ENVIRONMENTAL CONDITIONS

The table below shows our benchmark for environmental standards.

Qualification Standards		
A4RD	SK1	SK2
Vibrations	MIL STD 167 : Type 1	
	STANAG 4370 AECTP400: Method 401 Table E1	
	MIL-STD 810G : Method 514.6 Cat. 21 - Method 528	
	DEF STAN 0035 : Test M1 figure A28	DEF STAN 0035 : Test M1 figure A29
Shocks	DEF-STAN 0035 Part 3	
Emission	MIL-STD 461E: CE102 Basic Curve, RE102 Submarine application (internal to pressure hull) RE 102 Surface Ship application (below desk)	MIL-STD 461E: CE102 Basic Curve RE102 Navy Fixed & Airforce RE 102 Surface Ship application (top side)
Susceptibility	MIL-STD 461E: CS101, CS114, CS115, CS116, RS103	
Operating temperature	MIL-STD 810F, Method 501.4 et 502.4, Procedure II	
Humidity	MIL-STD 810F, Method 507.4	
Salt fog	MIL-STD 810F, Method 509.4, Procedure I	
Waterproofness	IP 68, immersion 1 meter	

## FRONT BUTTONS OPTIONS AND PRODUCT MOUNTING

Front buttons can be proposed as option. Contact us.  
Standard rear mounting is assured by 4 x M8 screws.  
Front attachment is made on specific request with Minimum Quantity Order.  
It offers 4 x M5 screws for front mounting.



## COLOR PRODUCT

Standard color is black (GAM C Black 36X3).  
Other colors can be proposed on request with Minimum Order Quantity.



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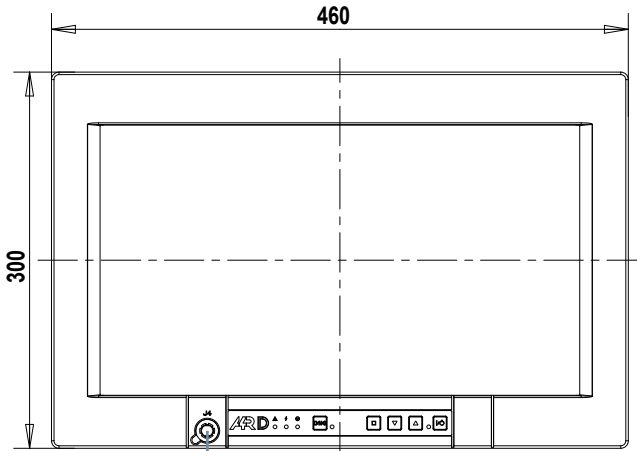
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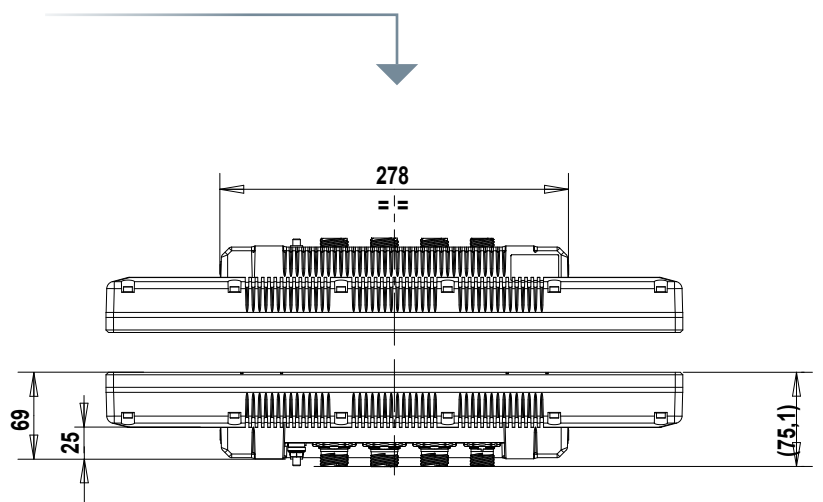
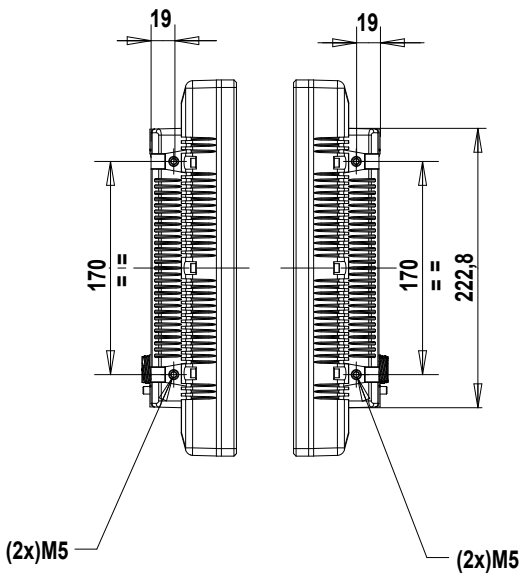
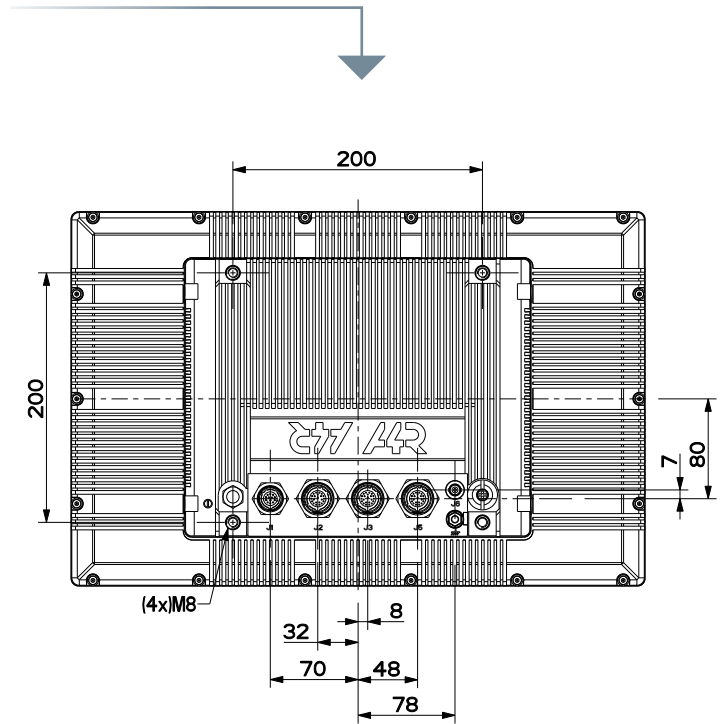
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# TECHNICAL LAYOUT

Dimensions are in millimeters (mm).



Standard front USB connector that can be removed as an option



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