



INDUSTRY



RUGGED PANEL PC

A4R SERIES

12" A4R 6512 WX



Key Features

- > IP68/NEMA 6P waterproof
- > CE/EN compliant & ATEX capability
- > Rugged touch screen (glass to glass technology)
- > Optional 12/16 programmable function buttons
- > Multiple I/O & reconfigurable pin-out
- > High connectivity with flexible positioning of the connectors
- > USB front connector
- > Performing CPU & GPU up to Intel Core™ i7
- > ROHS compliant

IRTS 6512WX is a 12" smart panel of the A4R Family, a comprehensive range of 10" to 17" IP68 / NEMA 6P rugged panel PCs.

Its specific design, advanced processing, graphic display and video capabilities meet the evolving and operational needs of industry sectors and cope with the toughest environments.

A4R Technology, based on mechanical and electronic common architecture, generates modular and flexible configurations. It allows selecting screen sizes (10", 12", 12"W, 15", 15"W & 17"W), brightness level and processors performance.

Tightly coupled with client hardware and software - control, command, communication systems - open-ended electronic architecture and easy mounting make it the choice of prime system integrators as a reliable, configurable, upgradeable, best cost and lead time COTS (Commercial Off The Shelf) equipment in operational use today.

See also the other smart panels in the A4R series specifically designed for your Airborne, Army or Navy applications, as well as the displays of the A4RD series.

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RUGGED ELECTRONICS, COMPUTERS & DISPLAYS


PRODUCT SPECIFICATIONS

Display Module	
	Size 12"
	Resolution 1280 x 800 (WXGA)
	Brightness 700 Cd/m ² (LED Technology)
	Pixel pitch 0,204 (H) x 0,204 (V) mm
	Viewing angles 85-85 (H) / 85-85 (V)
	Response Time 24 ms (Tr+Tf) White to Black
	Contrast Ratio 1000 : 1
	Display Color 16.2 M (Dithering)
	Dimming ratio up to 10 Cd/m ²
	Touch screen characteristics Resistive 5 wires
Controls	
	Remote control Backlight, blackout and On/Off control in front
	Additional control capability 3 free programmable function keys
Option	Additional front control buttons 6 x 2 programmable function buttons
Integrated Computer	
	Microprocessor Intel® Core™ i3-6100U (6th Generation)
	Memory 4 GB, up to 16 GB DDR4 SO-DIMM
	Graphic controller Integrated GPU
	Serial Ports 4 x Serial multiprotocol V11/V24 Soft. Conf.
	Digital I/O 4 x opto-isolated (Input / Output)
	Audio 1 x Out mono, 1 x In mono
	USB 2.0 1 x External / 1 x Front panel
	Ethernet 1 x 10/100/1000 Mbits
	Extension slots 1 x mini PCIe + 1 x IRTS format extension board
	Disk SSD 32 GB SATA (iSLC), up to 512 GB
	Operating system Windows Seven Embedded 64bits or Linux Xubuntu 16.04 64 bits
	Security Feature TPM 2.0
	BITE Unit Management Software
Electrical Features	
	Power supply Power 18/36 VDC with galvanic isolation
	LiPo Internal LiPo battery option
	PLD Power Line Disturbance optional module
	Power consumption 50 W normal environment cond. 80 W max in cold environment
Physical Features	
	Dimensions 333 x 240 x 83 mm
	Weight 7.3 Kg
	Mechanical fixing 200 x 200 - 4 x M8
	Packaging / color Aluminum / GAM C BLACK 36X3 (Other colors available)
Connectors Types & Position	
	Connectors position UP in standard or either DOWN, LEFT, RIGHT
	Connectors type FISCHER DBPLU - sizes 103 & 105
	Front USB Connector 1 x Fischer DBPLU serie 102 on front panel
	Connecteur Caps Standard on front, optional on the others connectors
Options	
	Composite Video 1 x Coaxial composite PAL/NTSC (BNC)
	Optical bonding Bonding LCD Panel
Warranty	
	Two-year limited warranty (parts and labor)
	Additional coverage and customized service plans available on request



IRTS

639 Boulevard des Armaris ■ 83100 Toulon ■ France

Tel.: +33 (0)4 94 20 78 00 ■ Fax : +33 (0)4 94 20 78 01

IRTS NATO CODE : FAAJ7

Contact : sales@irts.fr ■ www.irts.fr

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RANGE OF DISPLAYS

A4R offers a wide range of smart panels whose 6 monitor's screen sizes and 2 brightness levels will meet your needs for your indoor and outdoor applications. IRTS has designed 3 additional A4R panels - 13"HD, 15"WX and 17"WU - whose screen sizes could meet your specific needs (contact us for more information).



A4R LCD DISPLAYS	10"4	12"	15"	12"W	15"6 W	17"3 W
	XGA			WXGA	HD	
A4R Series	A4R10 XG	A4R12 XG	A4R15 XG	A4R12 WX	A4R15 HD	A4R17 HD
Screen Ratio	4/3			16/10	16/9	
Resolution	1024 x 768			1280 x 800	1920 x 1080	
A4R Standard Luminance cd/m ²	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°
A4R Outdoor Luminance cd/m ² (option)	700	900	1000	1000	On customer request	
Viewing Angles	80°/80°- 80°/80°	80°/80°- 80°/80°	80°/80°- 60°/80°	80°/80°- 60°/80°	On customer request	
Sunlight readability (option)	IRTS bonding technology (applicable to standard & outdoor versions)			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.

Oil & Gas, Mining
Maritime, ATEX

A4R for Industry		A4R Range	
		SKU L	
Display Size	A4R Series	Rugged Model	
10"	10"4 XGA (1024 x 768)	A4R10 XG	
12"	12" XGA (1024 x 768)	A4R12 XG	
	12" WXGA (1280 x 800)	A4R12 WX	
15"	15" XGA (1024 x 768)	A4R15 XG	
	15"6 HD (1920 x 1080)	A4R15 HD	
17"	17"3 HD (1920 x 1080)	A4R17 HD	
Power Supply Characteristics		18/36 VDC	
DC Power Supply		85/265 VAC 50-400Hz	
AC Power Supply		Operating Environmental Conditions	
1 Ruggedization Level		Level L	
Operating Temperature Range		Standard range	
Standard range		- 20° to + 55°C	
Option		- 32° to + 60°C	
Mechanical EN60069		Level L	
Vibrations		10-500 Hz: 2G/3 axes to EN 60068-2-6	
Shocks		30 g 11 msec Half Sine, 3 axes to EN 60068-2-27	
EMC/EMI CE Standards		Level L	
EN 61000 - Generic standards		EN 61000-6-2, Immunity for industrial environments	
EN 55022 - Radio disturbance		EN 55022 Class B, Emission & susceptibility	



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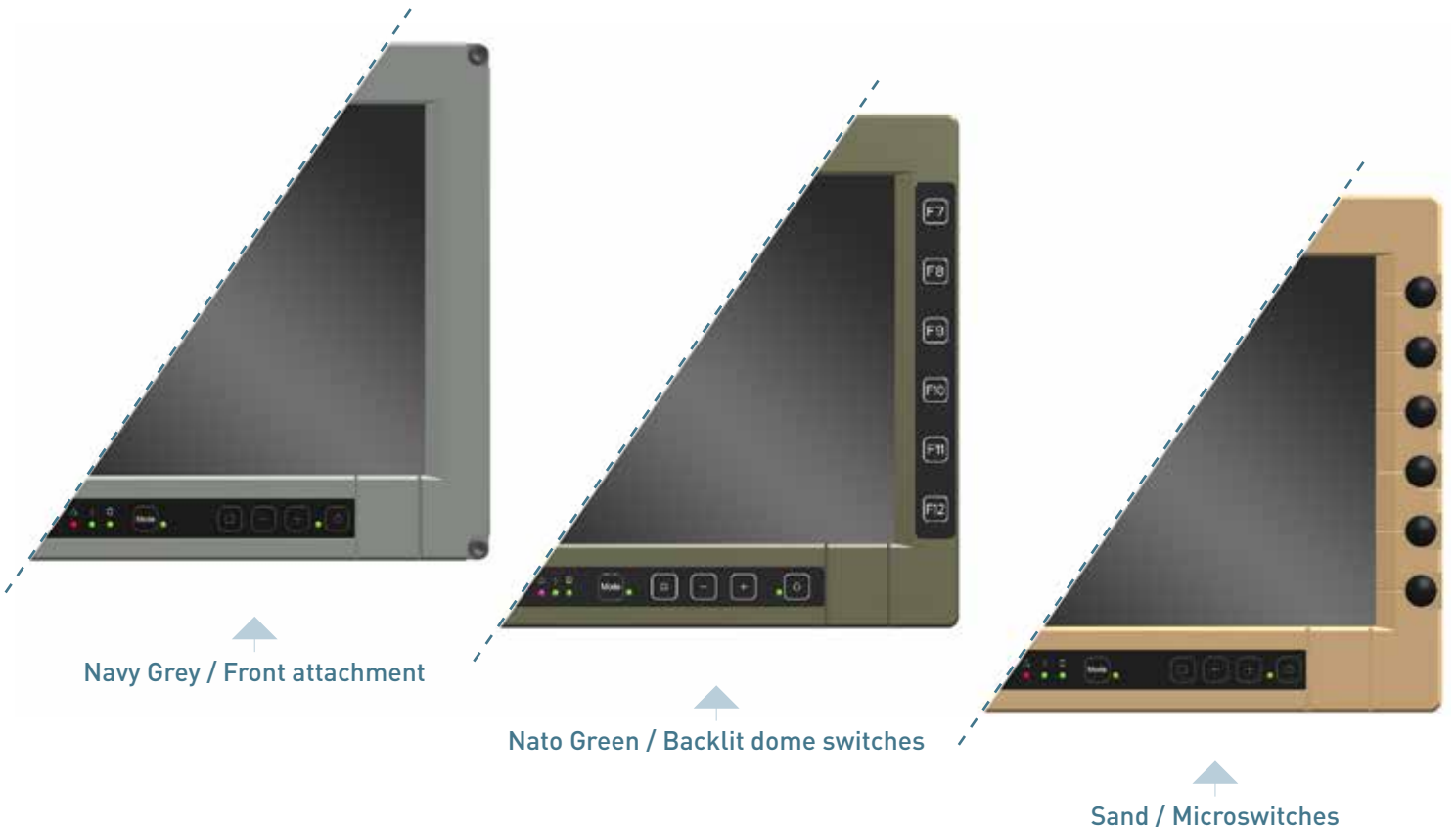
ENVIRONMENTAL CONDITIONS

The table below shows our benchmark for environmental standards.

Environmental conditions	
Vibrations	EN 60068-2-6
Shocks	EN 60068-2-27
EMC	EN 61000-6-2, EN 55022 Class B
Humidity	10 % to 90 % Relative Humidity, non-condensing
Operating temperature	EN 60068-2-32
Waterproofness	IP 68 / NEMA 6P, 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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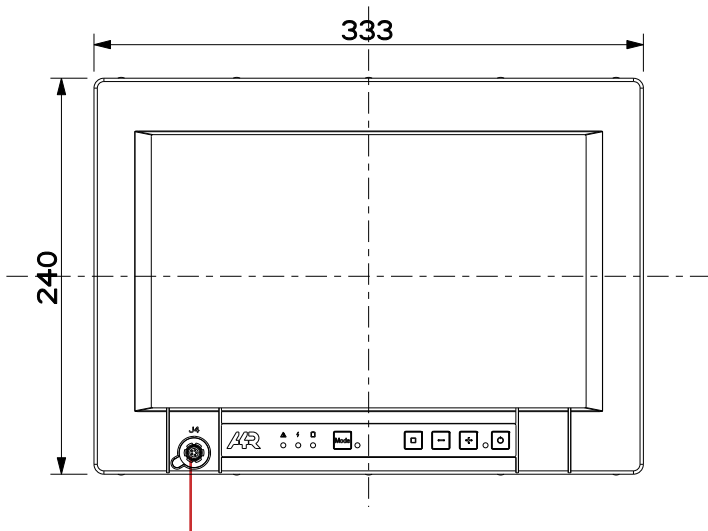
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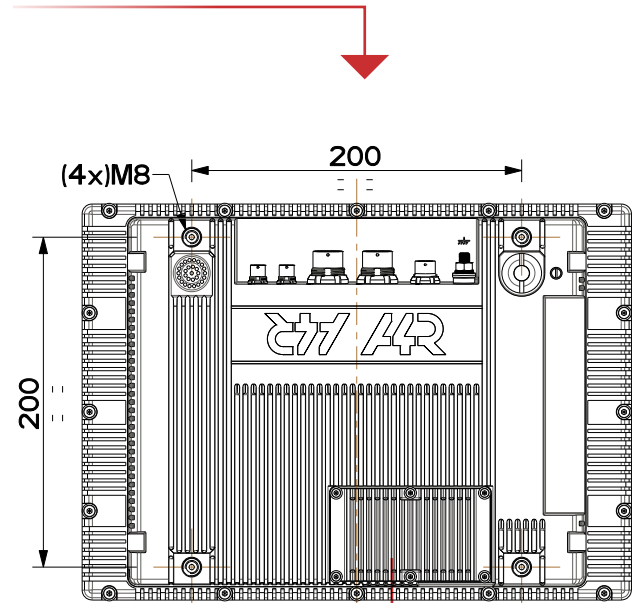
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TECHNICAL LAYOUT

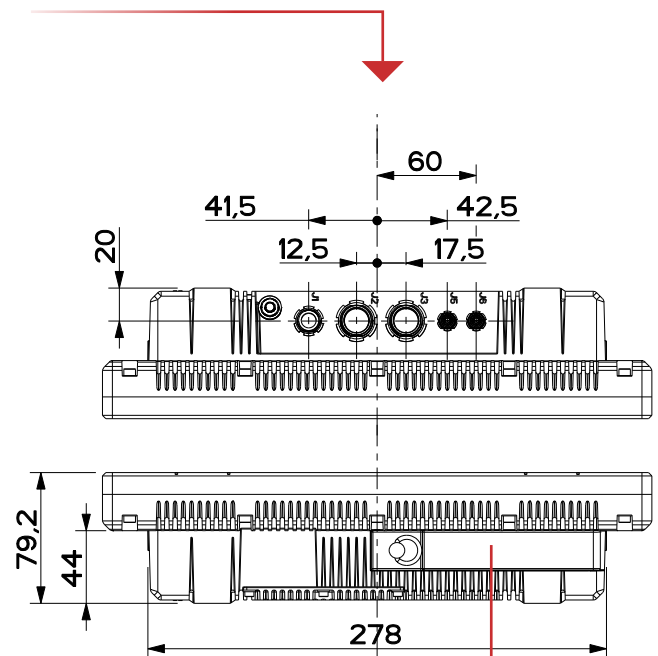
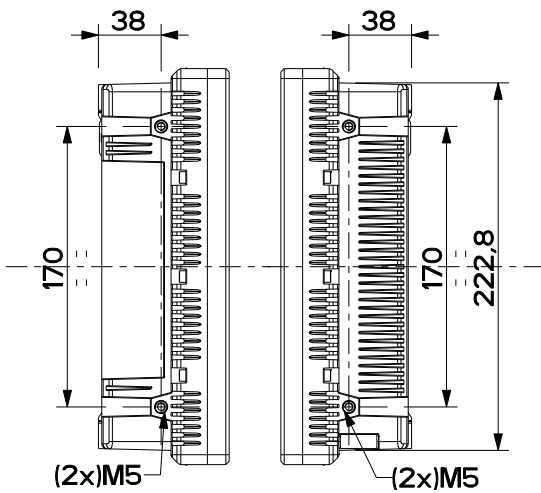
Dimensions are in millimeters (mm).



Standard front USB connector that can be removed as an option



Optional battery hatch



Optional removable hard drive hatch



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