



# INDUSTRY



RUGGED DISPLAY

A4RD SERIES

## 10"4 A4RD 5710 XG



10"4

### Key Features

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

**IRTS 5710SX** is a 10" display from A4RD Family, a comprehensive range of 10" to 17" IP68 / NEMA 6P rugged displays.

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

Direct interface with client system, versatile configuration capabilities 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 displays in the A4RD series specifically designed for your Airborne, Army or Navy applications.

[www.irts.fr](http://www.irts.fr)

RUGGED ELECTRONICS, COMPUTERS & DISPLAYS



## PRODUCT SPECIFICATIONS

| Display Module   |  |
|--|--|
| Size   | 10.4"  |
| Resolution   | 1024 x 768 (XGA)   |
| Brightness   | 600 Cd/m <sup>2</sup> (LED Technology)   |
| Pixel pitch  | 0.2055 (H) x 0.2055 (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  | 16.7 M   |
| Dimming ratio  | up to 10 Cd/m <sup>2</sup>   |
| Touch screen characteristics   | Resistive 5-wire Glass to Glass technology   |
| NVIS capability  | MIL-STD-3009, Class B  |
| Controls   |  |
| Remote control   | Backlight, blackout and On/Off control in front  |
| Additional control capability  | 3 x free programmable function keys  |
| Option   | Additional front control buttons   |
|  | 6 x 2 programmable function buttons  |
| Integrated Video Controller  |  |
| Graphic controller   | IRTS Embedded Video Controller   |
| Analog Video   | 1 x input VGA  |
| Digital Video  | 1 x input DVI  |
| Serial Ports (RS232/RS422)   | 1 x Serial touch controller / 1x Serial for remote control                                 |
| USB 2.0  | 1 x Touch controller / 1 x Remote control  |
| BITE   | Unit Management Software   |
| Electrical Features  |  |
| Power supply   | Power 18/36 VDC with galvanic isolation  |
| PLD  | Power Line Disturbance optional module   |
| Power consumption  | 50 W normal environment cond. 80 W max in cold environment                                 |
| Physical Features  |  |
| Dimensions   | 278 x 224 x 61 mm  |
| Weight   | 5 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, DOWN in option   |
| Connectors type  | FISCHER DBPLU - sizes 103 & 105  |
| Options  |  |
| Composite Video  | 1 x Coaxial composite PAL/NTSC (BNC)   |
| Optical bonding  | Bonding LCD Panel  |
| Front USB Connector  | 1 x Fischer serie 102 for connection transfer from CPU (key board, pointing devices, etc.) |
| Connecteur Caps  | 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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## 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   | XGA   |                         | WXGA                    | HD                  |                  |
| A4RD Series                                       | A4RD10 XG   | A4RD12 XG   | A4RD15 XG               | A4RD12 WX               | A4RD15 HD           | A4RD17 HD        |
| Screen Ratio                                      | 4/3   | 4/3   |                         | 16/10                   | 16/9                |                  |
| Resolution  | 1024 x 768  | 1024 x 768  |                         | 1280 x 800              | 1920 x 1080         |                  |
| A4RD Standard Luminance cd/m <sup>2</sup>         | 600   | 700   | 700                     | 700                     | 400                 | 300              |
| Viewing Angles                                    | 85°/85°-85°/85°<br>IPS™   | 85°/85°-85°/85°<br>IPS™   | 85°/85°-85°/85°<br>IPS™ | 85°/85°-85°/85°<br>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 |                  |
| 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.

Oil & Gas, Mining  
Maritime, ATEX

| A4RD for Industry            |                       | A4RD Range   |  |
|------------------------------|-----------------------|--|--|
|                              |                       | SKU L  |  |
| Display Size                 | A4RD Series           | Rugged Model                                       |  |
| 10"                          | 10"4 XGA (1024 x 768) | A4RD10 XG  |  |
| 12"                          | 12" XGA (1024 x 768)  | A4RD12 XG  |  |
|                              | 12" WXGA (1280 x 800) | A4RD12 WX  |  |
| 15"                          | 15" XGA (1024 x 768)  | A4RD15 XG  |  |
|                              | 15"6 HD (1920 x 1080) | A4RD15 HD  |  |
| 17"                          | 17"3 HD (1920 x 1080) | A4RD17 HD  |  |
| Power Supply Characteristics |                       | 18/36 VDC  |  |
| DC Power Supply              |                       | 85/265 VAC 50-400Hz                                |  |
| AC Power Supply              |                       |  |  |
| 1 Ruggedization Level        |                       | Operating Environmental Conditions                 |  |
| Operating Temperature Range  |                       | Level L  |  |
| 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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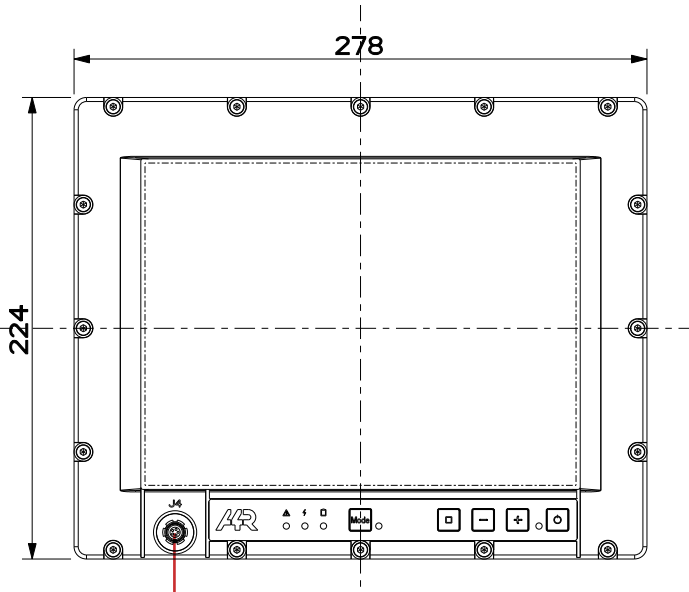
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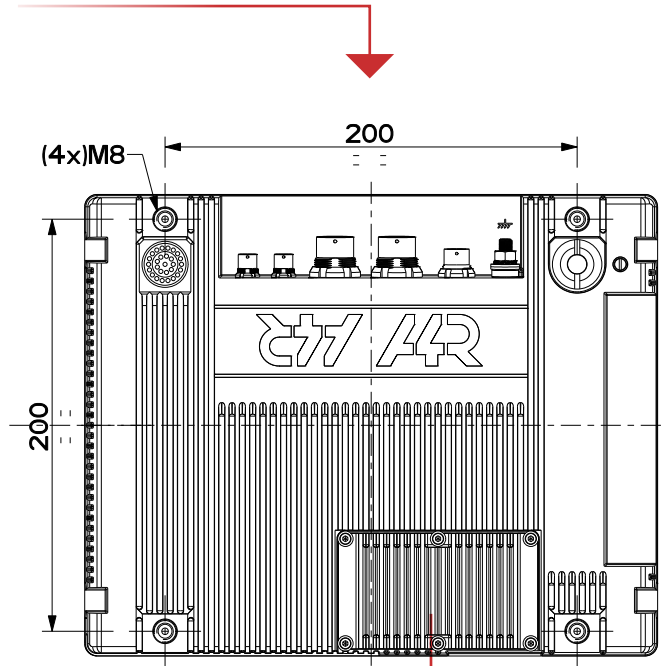
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# TECHNICAL LAYOUT

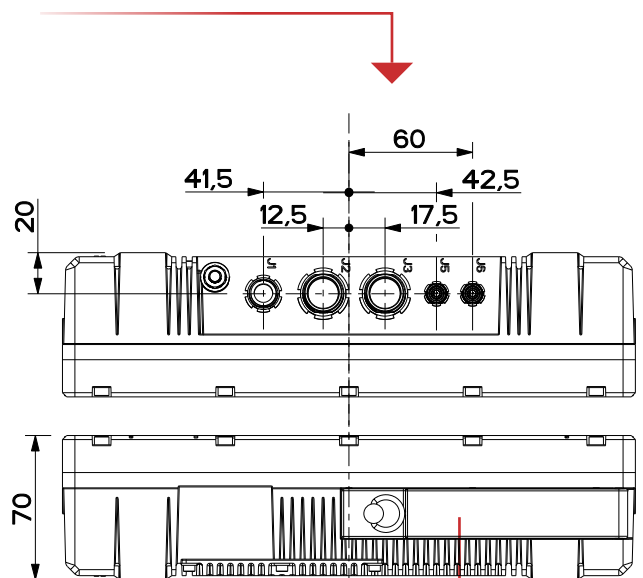
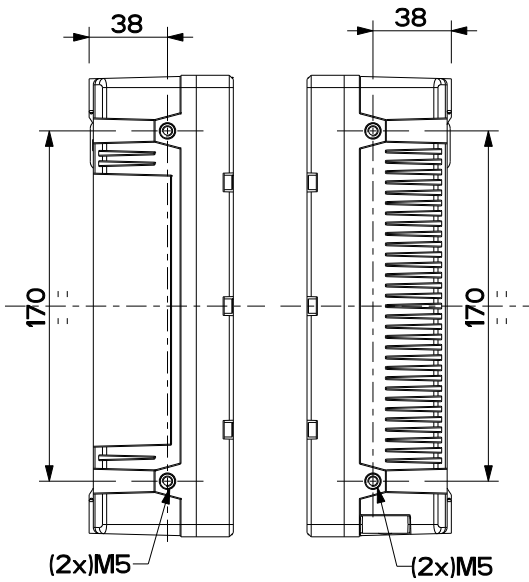
Dimensions are in millimeters (mm).



Standard front USB connector that can be removed as an option



Optional battery hatch



Optional removable hard drive hatch



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