



MILITARY



MULTI-FUNCTION DISPLAY

A4RV SERIES

# 12" A4RVN 6712WX-SL



**Real Time Digital Video  
Smart Display  
with Overlay Capabilities**

12"

## Key Features

- > GigE Vision Video PIP
- > Overlay drawing
- > Real Time Sight
- > Low latency video
- > 5 levels of overlay
- > Full MIL specs qualified
- > Optional front buttons
- > Option USB front connector
- > RoHS compliant

IRTS A4RVN 6712WX-SL a digital video Multi-Function Display combines the functionality of an ARM processing unit with a powerful hardware real-time video processing with overlay capabilities.

Designed for low-latency display of optoelectronic video, these MFDs are particularly suitable for use in firing systems, with low contribution in the feedback firing loop.

In order to facilitate the growing use of augmented reality in battlefield management systems, the IRTS MFD hardware enables efficient drawing of graphical objects (shooting reticule, png/bmp, text, widget, bar graph, etc...) in multiple overlay planes.

A4RVN 6712WX-SL features the functionality of a Dual Core ARM A9 processing unit with:

- > Gigabit Ethernet video interface (GigE Vision & DEFSTAN-0082 compliant) with powerful hardware video processing for fixed, low latency video display
- > Or Analog backup video input PAL/NTSC with optimized de-interlacing algorithms
- > Up to 5 levels of overlay with graphic co-processing for real-time display of graphic objects (for augmented reality)
- > Real-time video/image JPEG2000 hardware compressor (for video recording or video streaming)

A4RVN 6712WX-SL can be equipped or not with a rugged analog-resistive "glass to glass" touchscreen & optional, lighted or not, front function buttons.

A4RVN-SL is a perfect GigE Vision client display or standalone slim and low cost MFD.

For others screen sizes or resolutions, please ask us.

## PRODUCT SPECIFICATIONS

Display Module	
<b>Size</b>	12"
<b>Resolution</b>	1280 x 800 (WXGA)
<b>Brightness</b>	700 Cd/m <sup>2</sup> (LED Technology)
<b>Dot pitch</b>	0.204 (H) x 0.204 (V) mm
<b>Viewing angles</b>	85-85(H) / 85-85(V)
<b>Response Time</b>	16 ms (Tr+Tf) White to Black
<b>Contrast Ratio</b>	700 : 1
<b>Color resolution</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
Integrated computer	
<b>Microprocessor</b>	Dual core ARM-A9 @ 800MHz
<b>Memory</b>	RAM 256 to 1024MB DDR3
<b>Disk</b>	SSD 8 to 128 Go (SDCard slot)
Video input/Overlay	
<b>Digital video input</b>	1 x DVI/USB or Internal CPU video
<b>Ethernet Video</b>	1 x 10/100/1000Mbits - Gigavision or DEF STAN 00-82
<b>Analog input</b>	1 x PAL/CCIR - 750hms
<b>Digital input</b>	1 x HD-SDI - 750hms
	1 configurable transparent colour for the overlay
	Video is visible only on the surfaces where the computer is displaying the transparent colour
Total reponse time on video : 40 ms	
Video output	
<b>Image capture</b>	Video recorder capable with JPEG2000 codec
Software	
<b>Operating system</b>	Linux
<b>BITE</b>	UTV Management
Electrical Features	
<b>Power supply</b>	Power 18/36V DC with galvanic isolation - 1275D compatible
<b>Power consumption</b>	50W without heating device
	80W with heating device
Physical Features	
<b>Dimensions</b>	333 x 240 x 40 mm
<b>Weight</b>	6,5 Kg
<b>Mechanical standard</b>	200 x 200 - 4 x M8
<b>Packaging / Painting / Color</b>	Aluminium / NORMEDEF 00001/ BLACK
Connectors	
<b>Type</b>	FISCHER
<b>Front USB connector</b>	1 x Fischer DPLU (core) serie 102 on front panel
<b>Connector Caps</b>	Standard on front, optional on the others connectors
Warranty	
Two-year limited warranty (parts and labor)	
Additional coverage and customized service plans available on request	



**IRTS**

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IRTS NATO CODE : FAAJ7

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## ENVIRONMENTAL CONDITIONS

### Airborne

<b>Random Vibrations</b>	RTCA DO-160E Section 8 Cat.R Zone 2, Cat.U2, up to 5.95g RMS
<b>Sinus Vibrations</b>	RTCA DO-160E Section 8 Cat.R Zone 2 Curve L, up to 3g
<b>Shocks</b>	RTCA DO-160E Section 7 Cat. B, 30g 11ms half sine
<b>Emission</b>	RTCA DO-160E Section 21.3 & 21.4 Cat.M
<b>Susceptibility</b>	RTCA DO-160E Section 18 Cat. Z & Section 19 Cat. ZN, RTCA DO-160E Section 20 CS & RS Cat. Y
<b>Humidity</b>	RTCA DO-160E Section 6 Cat. A, T = +55°C, HR = 5 to 95%
<b>Operating temperature</b>	RTCA DO-160E Section 4.5.2 & 4.5.4 Cat. B1, -20°C / +55°C
<b>Waterproofness</b>	IP 68, immersion 1 meter

### Army

<b>Random Vibrations</b>	MIL-STD-810G Method 514.6, up to 5,93g RMS (Tracked vehicle)
<b>Bumps</b>	DEF-STAN 0035 TEST M12, 40gx6ms - 1000 shocks/axe
<b>Shocks</b>	STANAG 4370 AECTP400: Method 403, 44gx13ms half sine
<b>Emission</b>	MIL-STD-461E Army ground equipment CE102, RE102
<b>Susceptibility</b>	MIL-STD-461E Army Equipment CS101, CS114, CS115, CS116, RS103
<b>Humidity</b>	MIL-STD-810F Method 507.4 T = +60°C, HR = 5 to 95%
<b>Operating temperature</b>	MIL-STD-810F Method 501.4 & 502.4 Procedure II, -32°C / +60°C
<b>Waterproofness</b>	IP 68, immersion 1 meter

### Navy

<b>Random Vibrations</b>	MIL-STD-810G Method 514.6 Cat. 21 Method 528, up to 5.8g RMS
<b>Sinus Vibrations</b>	MIL-STD 167 Type 1, up to 1.28g
<b>Schoks</b>	DEF-STAN 0035 Part3, 30g 11msec half sine
<b>Emission</b>	MIL-STD-461E Naval equipment CE102, RE102
<b>Susceptibility</b>	MIL-STD-461E Naval equipment CS101, CS114, CS115, CS116, RS103
<b>Humidity</b>	MIL-STD-810F Method 507.4 T = +60°C, HR = 5 to 95%
<b>Operating temperature</b>	MIL-STD-810F Method 501.4 & 502.4 Procedure II, -32°C / +60°C
<b>Waterproofness</b>	IP 68, immersion 1 meter

## 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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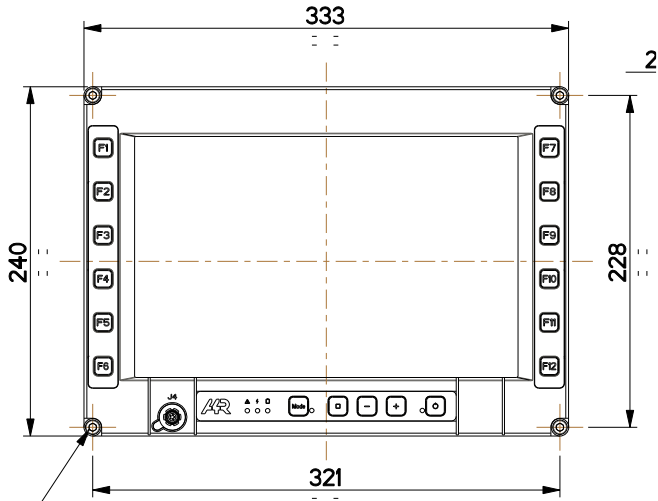
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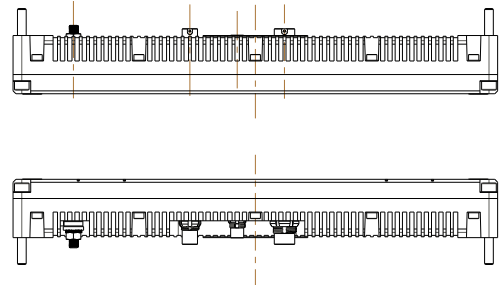
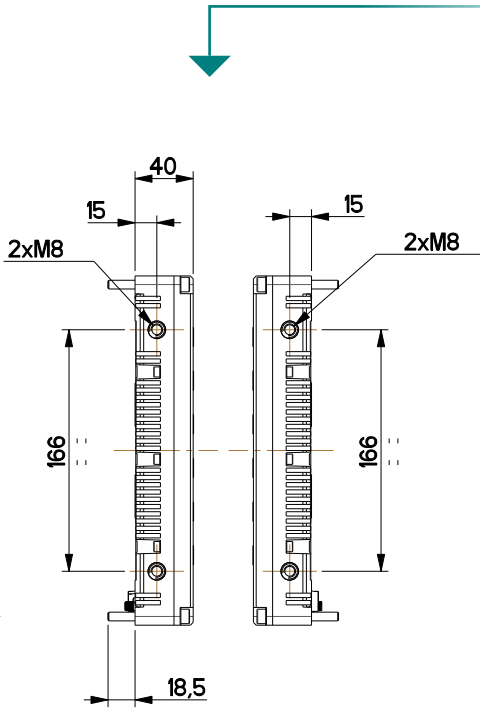
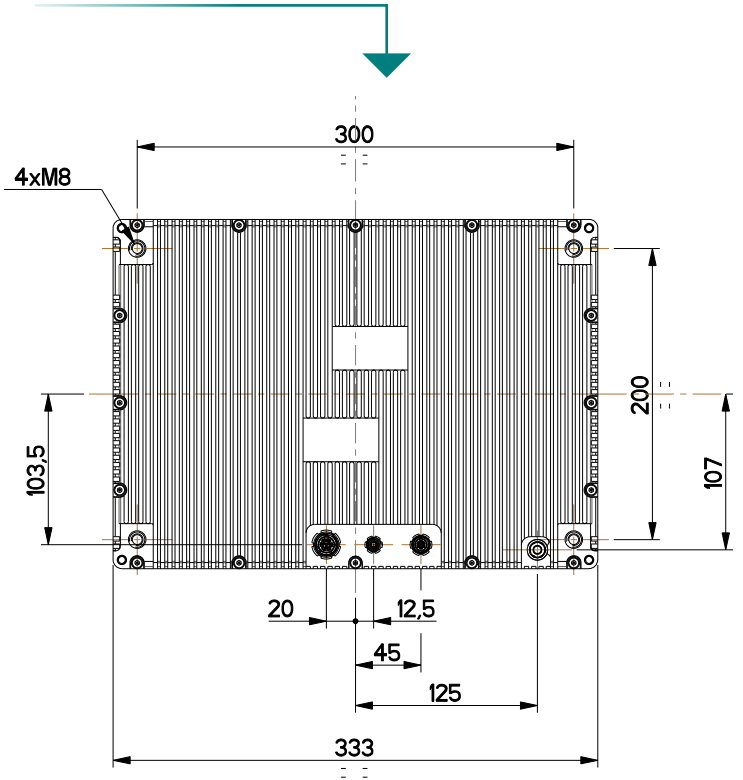
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# TECHNICAL LAYOUT

Dimensions are in millimeters (mm).



4x captive screws ISO 4762 M6x50



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