

# PANEL PC 12"

## RUGGED PANEL PC



**PANEL PC 12"** is a fanless touch screen panel dedicated to harsh environments.

The best low power consumption solution for embedded applications which need a high brightness screen and a high powerful computer in a same compact frame.

**PANEL PC 12"** runs with traditional operating systems as Win8 , Win7, WES8, WES7, WEC7, Linux Kernel 3.x, VxWorks 6.9.3.3, Android KitKat 4.4 (other distribution on demand).

**PANEL PC 12"** is compatible with night applications with a 0 to 100% dimmable brightness adjustment.

**PANEL PC 12"** is qualified according to environmental standards MIL-STD810F and MIL-STD461E.

- ◆ Rugged embedded Panel PC
- ◆ Intel Atom E3845 Quad Core 1.91 GHz
- ◆ 2 Intel GbE + 2 USB 3.0 + 1 RS232 + 1 RS485 + audio channel
- ◆ Extension slot for client applications with connectors I/O
- ◆ 12.1" screen, 1024x768 pixels
- ◆ 0 to 100% dimmable
- ◆ Rugged connectors
- ◆ Low Consumption ( $\leq 30W$ )
- ◆ 5 wires resistive touch screen
- ◆ Climatic & vibration qualification : MIL STD 810F
- ◆ CEM qualification : MIL STD 461E

### APPLICATIONS

- Aircraft
- Navy
- Military Vehicles
- Transport / Railway
- Power plants

## SPECIFICATIONS\*

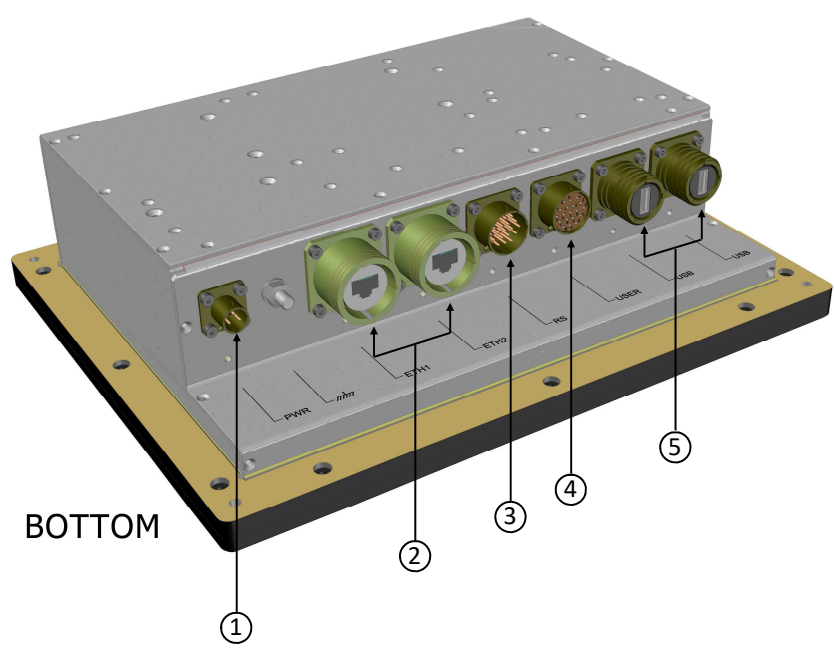
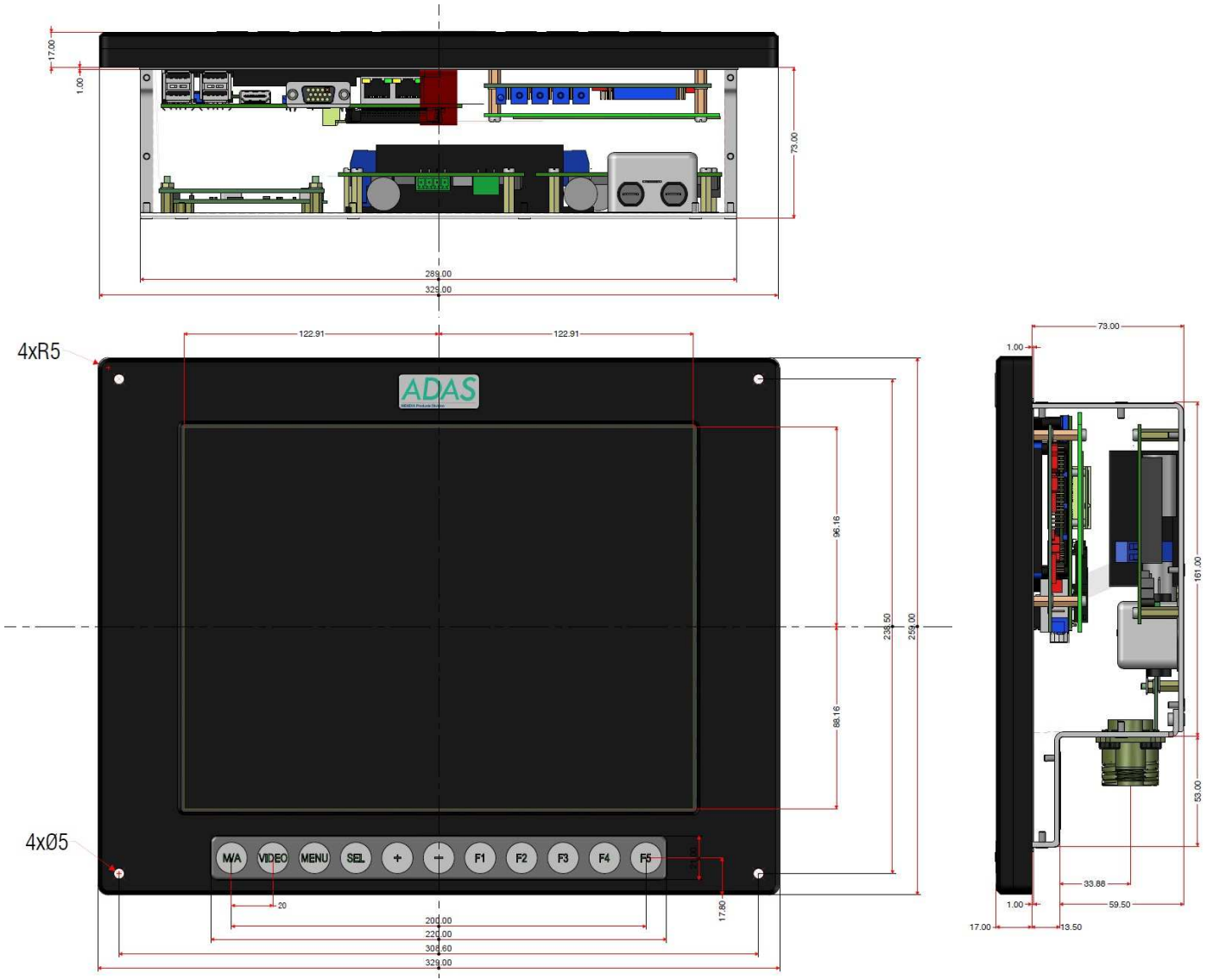
General	
Enclosure	Aluminium
Processor	Intel Atom E3845 Quad Core 1.91 GHz
BIOS	AMI UEFI Bios at 64-Mbit
Memory	8Go DDR3L 1333 MHz
Hard disk drive	16 Go (Flash), up to 64 Go (on request) SSD hard disk drive (on request)
Extension slot	1 x Mini PCIexpress (1 x Full size). Other extension on request.
Ethernet	Intel i210 (Eth1 et Eth2) GbE 10/100/1000 Mbps
Ethernet compatibility	IEEE 802.3az
USB	Compatible 3.0 (480 MB/s), 500 mA per channel
Audio	Intel High Definition Audio Interface, Line In, Line Out and Mic In
Touch solution	5 wires resistive touch screen (driver installed)
External dimensions	329 (w) x 259 (h) x 90 (d) mm
Fixations spacing dimensions	308.60 (w) x 238.50 (h) mm
Fixations	4 x M5 screws
Weight	5 kg (11.02 Lbs)
Battery	RTC battery 3V / 210 mAh
Power supply	DC: 12 Vdc – 36 Vdc, 30 W max AC: 90 Vac – 264 Vac, 30 W max
Power protection	Reverse polarity for DC voltage. Over voltage and over current Spikes
Operating systems	Win8 , Win7, WES8, WES7, WEC7, Linux Kernel 3.x, VxWorks 6.9.3.3, Android KitKat 4.4 (other distribution on demand)

<b>Display</b>	
Type	LCD touch screen display
Screen size (Diagonal)	310 mm (12.1")
Active Area	245.7 (H) x 184.3 mm (V) (4:3 format)
Resolution	1024 (h) x 3 (RGB) x 768 (v)
Luminance	800 cd / m <sup>2</sup>
Contrast ratio	900 : 1 (Typical)
Support color	16.7M
Viewing angle	80° (Up), 80° (Down), 80° (Right), 80° (Left)
backlight life	70 000 hours
<b>Connectors</b>	
Power supply (DC/AC)	DC: HE851-02E83AP50 AC: HE851-02E833P50
USB1	USBF TV21
USB2	USBF TV21
Ethernet 1	RJF TV21
Ethernet 2	RJF TV21
RS232/RS485 and audio	HE851-02E1419P50
User	HE851-02E1419S50
<b>Environment</b>	
Operating temperature	-20°C - +70°C
Storage temperature	-30°C - +85°C
High temperature	MIL-STD-810F Method 501.4
Low temperature	MIL-STD-810F Method 502.4
Temperature shock	MIL-STD-810F Method 503.4
Humidity (storage)	95% -non-condensing, MIL-STD-810F Method 507.4
Vibration	MIL-STD-810F Method 514.5
Shock	MIL-STD-810F Method 516.5
Constant acceleration	MIL-STD-810F Method 513.5
Altitude	functional at 70 000 ft, MIL-STD-810F Method 500.4
Waterproof	Font panel IP65 compliant
CEM	MIL-STD-461E (CE101, CE102, RE101, RE102, CS101, CS114, CS115, RS101, RS103)
RoHS	RoHS2

<b>ACCESSORIES</b>	
<b>Plug set (DC/AC versions)</b>	
DC Power supply	DC: HE851-06EC83AS50 AC: HE851-06EC833S50
USB	2 x USBF TV6
Ethernet RJ45	2 x RJF TV6
RS232/RS485 and audio	HE851-06EC1419S50
User	HE851-06EC1419P50
<b>Transport case</b>	Robust water resistant polypropylene case, with pressure equalization valve

*\*Specifications given for 25°C*

# INTEGRATION



**REMOTE CONNECTIONS**  
 Example:  
 1. Power  
 2. Ethernet  
 3. Serial  
 4. User  
 5. USB

**ORDERING INFORMATION**

PANEL-PC-12/DC	Rugged panel PC 12", with DC power supply
PANEL-PC-12/AC	Rugged panel PC 12", with AC power supply
PANEL-PC-12-DC/PLUG	Plug set for DC power supply
PANEL-PC-12-AC/PLUG	Plug set for AC power supply
SC-LARGE-TR-CASE	Transport case