

# RW104 EP

ELECTRONICS DIVISION

## 10.4" RUGGEDISED, MODULAR TACTICAL SMART DISPLAY



Based on the very latest Intel Core™ i7 CPU technology, the Rugged Workstation (RW) Enhanced Performance (EP) range of high resolution, modular multi-function tactical smart displays provide leading edge computing and display capability for the most demanding ground vehicle environments.

The RW EP range consists of HD displays in 4 different sizes - 10.4", 12.1", 15.0" and 17.3". All displays are direct sunlight readable and have a resistive touch-sensitive screen.

The RW104 is designed to withstand the harshest military environments including demanding 'on-gun' shock, water immersion and comply with the most stringent levels of EMC performance. This makes it ideal for integration into potential sensitive electromagnetic installations.

The RW104 utilises a common CPU/Input-Output processor module. This gives systems integrators the flexibility to mix and match smart displays while maintaining a common processing architecture.

Due to the modular nature of the design and the internal mini PCIe slots these displays are easily customised to meet specific customer requirements.

The MSATA expansion slots can also be configured as mini PCIe positions, allowing extra facilities and interfaces. Existing examples are Firewire, additional

Ethernet and Dual CAN bus. The displays are equipped with 30 programmable function keys which conform to the requirements of the GVA human-factors standard as defined by DEF-STAN 23-09.

### MODULAR CONSTRUCTION

The processing module can be fitted to the entire RW range of displays, giving the same functionality and features across a variety of sizes, resolutions and aspect ratios.

#### Mid-life upgrades

Modular Design simplifies mid-life upgrades and reduces through-life costs.

#### Through-Life Support Services

Support is provided through the continual monitoring and reporting of obsolescence issues. Extensive technical support services are also provided, ranging from calibration to a spares and repairs service.

# EXTREME SHOCK AND VIBRATION

The RW104 uses an innovative, patented internal vibration and shock system to provide shock protection to internal components. This system allows installation without the need for additional, expensive anti-vibration kits. Shock protection has been qualified for tracked, wheeled, trailered and on-gun operation.

On-gun installation is available with bespoke kits to suit the shock profile of a particular gun.

# STORAGE AND SECURITY

A variety of storage options are available. The display can accommodate up to 3x MSATA Solid-State (SSD) devices and an option for a removable 1.8"/2.5" drive. RAID 1 is supported on the MSATA interfaces.

Secure and encrypted versions are also available, whereby the security level of the data on the SSD is reduced by two levels when power is removed. It is also possible to provide secure or customised BIOS.



# TECHNICAL SPECIFICATION

## GENERAL

- › Display (sunlight readable & NVIS): 10.4" 1024 x 768
- › Processors: Intel® Core™ i7
- › Touch Screen: Resistive Touch Screen (option for resistive multi-touch)
- › Bezel Keys: Def-Stan 23-09 GVA layout
- › Storage: 3x MSATA devices, 4x USB 3.0 devices, 1x removable 1.8"/2.5" device, \*Customer connector versions available

## STANDARD INTERFACES

- › Ethernet: 2x 1000Mbit LAN Interfaces
- › USB: 4x USB 2.0 Interfaces; 2x USB 3.0 Interfaces
- › RS 232/422/423: 1x RS232, 1x RS422/485, 2x RS232/422/485
- › MilCAN: 1x MilCAN interface
- › Video In: Up to 4 high resolution Video Inputs – RS170, NTSC Video capture on all inputs
- › Video Out: VGA

- › Discrete I/O: 4x IN and 4x OUT I/O lines
- › Audio: PC line IN/OUT, MIC IN
- › Power: 28V DC to Mil-Stan1275D

## OPTIONAL INTERFACES

- › CAN: Single or Dual CAN
- › IEEE1394 (Firewire): Single IEEE1394 (Firewire) Interface
- › Audio: 8W Speaker Drive
- › Ethernet: 2x 1000Mbit LAN Interfaces
- › USB: 2x USB 3.0 Interfaces
- › GPS: Supports GPS, GLONASS, Galileo, and QZSS. NMEA, UBX and RTCM protocols

## MECHANICAL

- › Dimensions (w x h x d): 294mm x 236mm x 78mm
- › Weight: 4.75Kg

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