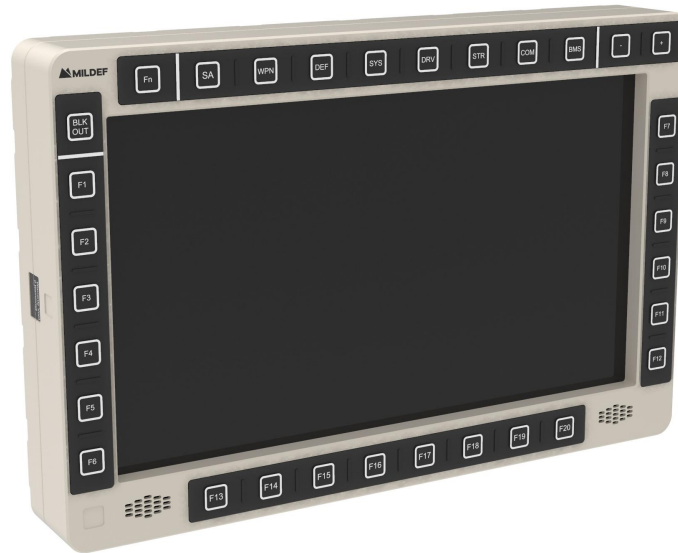


13.3" Display VDS1330



13.3" Rugged GVA Flat Panel Display

The VDS1330 is a rugged 13.3" GVA display unit with low latency, high brightness and full HD resolution.

Mode selection

The display has two DVI inputs that can be selected using the control interfaces (SNMP or USB HID). When in DVI modes at 1080P 60Hz the display is optimized for low latency. Using the control interfaces the display can be switched to VIVOE 0082 Stream mode and viewable streams are selected using the VIVOE MIB

GVA Bezel keys

The LED dimmable backlight bezel keys are designed based on the GVA Human Machine Interface (HMI) layout requirements. It has twenty programmable function keys which can be fully customised, a dedicated blackout button and eight pre-assigned GVA keys. A dedicated USB interface is used for control of the bezel buttons, display brightness and touch screen.

Rugged design for vehicle integration

The VDS1330 is optimized for operation in armoured vehicles and is designed for the Generic vehicle architecture (GVA) standard. The display is manufactured out of a solid piece of milled aluminium and comes with hardened glass and 38999 Mil connectors to withstand the most demanding environments.

Features

- 13.3" TFT LCD Display
- Full HD resolution
- Dual DVI Inputs
- Dual VIVOE inputs (DEF STAN 00-82)
- Resistive Touch
- Low Latency
- OSD GUI for video stream selection
- NVIS compatible
- Stereo Audio in with Stereo speakers built in
- VIVOE MIB for remote stream selection/Control
- RS422 interface (alternate Bezel event interface)

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Connector Interfaces

C1 (back)	• 1x Power
C2 (back)	• 1x DVI • 1x USB 2.0
C3 (back)	• 1x DVI
C4 (back)	• 2x 1000BASE-T
C5 (back)	• 2x USB 2.0
C6 (back)	• 1x RS422 • 1x Address • 1x Audio

Other Interfaces

1x Blanking button (front)
3x Function buttons (front)
20x GVA buttons (programmable) (front)
8x GVA buttons (preassigned) (front)
1x Resistive touch (front)
1x Stereo speaker (front)

Technical Specification

Blanking	Enable/disable all externally visible indicators from emitting light via the "blinking command"
Contrast ratio	800
Display luminance	1000 nits luminance
Display resolution	1920 x 1080 resolution
Display response	25 ms response time
Display size	13.3 inch
Management	Control and configuration via USB, RS422 or SNMP
Mode selection	Driver and situational awareness
Night vision	Day, Night, and NVIS mode (0.002 cd/m ²)
OSD	Configurable OSD
Optical clarity	Optically bonded display without parallax
Video over Ethernet	Video over Ethernet (VIOE) - DEF STAN 00-82
Electronics ground to chassis	Isolated
Polarity protection	Protected against incorrect polarity connection on the power input within the normal operating voltage range
Power consumption	66 W (with heater) 36 W (without heater)
Power input	16-36 VDC
Power to chassis	Isolated

Power to electronics ground	Isolated
Chassis material	Aluminum
Cooling	Passively cooled
Dimensions	345 x 226.5 x 50 mm (13.6 x 9 x 2 in) (WxHxD) excluding buttons and connectors
Earth point	M6 12 mm
Surface treatment chassis	Chromit-Al
Weight	5 kg (11 lbs)
CE	Compliant

Environmental Specification

Functional shock - Operating	MIL-STD-810H, Method 516.8, Procedure I - Functional shock. Table 516.8-IV, Terminal peak sawtooth pulse, Ground material 40 g 11 ms
IP Class (Solid Particle Protection)	IP Class 6X
IP Class (Water)	IP Class X5
Noise level	Maximum noise level of 40 dB SPL A-weighting at 1 m (3.3 ft) distance
STANAG 2895 A1	Cycle A1 Extreme Hot Dry 49 °C 71 °C
STANAG 2895 A2	Cycle A2 Hot Dry 44 °C 63 °C
STANAG 2895 A3	Cycle A3 Intermediate 39 °C 58 °C
STANAG 2895 B1	Cycle B1 Wet Warm 32 °C
STANAG 2895 B2	Cycle B2 Wet Hot 35 °C 63 °C
STANAG 2895 B3	Cycle B3 Humid Hot Coastal Desert 41 °C 71 °C
STANAG 2895 C0	Cycle C0 Mild Cold -19 °C
STANAG 2895 C1	Cycle C1 Intermediate Cold -32 °C
STANAG 2895 C2	Cycle C2 Cold -46 °C
Vibration - Helicopter	MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter

Vibration - Loose cargo MIL-STD-810H, Method 514.8, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo

Vibration - Tracked vehicle MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 20 - Ground vehicle - ground mobile, Tracked vehicle

Vibration - Wheeled vehicle MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 20 - Ground vehicle - ground mobile, Wheeled vehicle

EMC Specification

EMI conducted DCE01.B DEF STAN 59-411, Method DCE01.B, Conducted emissions on primary power lines Land service class A 500 Hz - 150 MHz

EMI conducted DCE02.B DEF STAN 59-411, Method DCE02.B, Conducted emissions on control signal lines and secondary power lines Land service class A 20 Hz - 150 MHz

EMI conducted DCE03.B DEF STAN 59-411, Method DCE03.B, Exported transients on primary power lines Land service 28 VDC Systems

EMI conducted DCS01.B DEF STAN 59-411, Method DCS01.B, Conducted emissions on primary power lines Land service 20 Hz - 50 kHz

EMI radiated DRE01.B DEF STAN 59-411, Method DRE01.B, Radiated emissions electric field Land service class A 10 kHz - 18 GHz

EMI radiated DRE02.B DEF STAN 59-411, Method DRE02.B, Radiated emissions magnetic field Air, land and sea service 20 Hz - 100 kHz

EMI radiated DRE03.B DEF STAN 59-411, Method DRE03.B, Radiated emissions electric field tuned antenna Land service class A 1.6 MHz - 30 MHz

EMS conducted DCS02.B DEF STAN 59-411, Method DCS02.B, Conducted susceptibility on control, signal and power lines Land service non safety critical 50 kHz - 400 MHz

EMS conducted DCS03.B DEF STAN 59-411, Method DCS03.B, Conducted susceptibility on control and signal lines Land and sea service 20 Hz - 50 kHz

EMS conducted DCS06.B DEF STAN 59-411, Method DCS06.B, Imported long transient susceptibility AC and DC systems 28 VDC land service 100 kHz

EMS radiated DRS01.B DEF STAN 59-411, Method DRS01.B, Radiated susceptibility magnetic field Air, land and sea service 20 Hz - 100 kHz

EMS radiated DRS02.B DEF STAN 59-411, Method DRS02.B, Radiated susceptibility electric field Land service class A 10 kHz - 18 GHz

EMS radiated DRS03.B DEF STAN 59-411, Method DRS03.B, Magnetic field (DC) susceptibility Land and sea service

ESD DCS10.B DEF STAN 59-411, Method DCS10.B, Electrostatic discharge