

# 13" MID1303



## 13.3" Modular Display

The MID1303 features a 13.3" full HD display, multi touch and 34 buttons on the front panel.

### MilDef Intelligent Displays (MID)

The MID series offers a range of display sizes from 13" up to 18". Other sizes can be made as a customer project.

### Removable computer module

All MID displays are compatible with MilDefs modular computers (MCS Series) via a standardized slot on the back of the unit. The computer module can be removed when not in operation for secure storage of classified information, training, or upgrades and software maintenance. The modular approach also enables midlife upgrades of the computer without the need to upgrade the display itself.

### Military-relevant rugged design

MilDef products are designed to operate in extreme environmental conditions and challenging electromagnetic operational scenarios. Operationally

proven, MilDef products are actively employed in military operations in over 60 countries.

### Guaranteed performance

MilDef products are designed for the long lifecycles of military programs and come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come.

We also guarantee the availability of spare parts for an additional 5 years after product end-of-life.

### Features

- 13.3 inch full HD display
- 1000 nits
- Multi Touch
- 34 front buttons
- Computer module docking (sold separately)

## Connector Interfaces

<b>SERVICE</b> (bottom)	• 1x RS232 Service
(back)	• 1x Docking interface
<b>X1 DC IN</b> (bottom)	• 1x Power
<b>X2</b> (bottom)	• 2x USB
<b>X3</b> (bottom)	• 1x ETH 1000BASE-T
<b>X4</b> (back)	• 1x LOGIC • 1x RTC POWER

## Other Interfaces

34x button panel (front)

## Technical Specification

<b>Blanking</b>	Enable/disable all externally visible indicators from emitting light via the "blinking command"
<b>Brightness control</b>	Two buttons to control brightness
<b>Contrast ratio</b>	800
<b>Display color</b>	16.7M colors
<b>Display luminance</b>	1000 nits luminance
<b>Display resolution</b>	1920 x 1080 resolution
<b>Display size</b>	13.3 inch
<b>Display surface</b>	Hardened glass 6H
<b>Response time</b>	35 ms
<b>Touch display</b>	Multi touch
<b>MIL-STD-1275E</b>	Fully compliant
<b>Polarity protection</b>	Protected against incorrect polarity connection on the power input within the normal operating voltage range
<b>Power consumption</b>	120 W
<b>Power input</b>	12-36 VDC
<b>Chassis material</b>	Aluminum
<b>Coating and color</b>	AE0305-6603120 Axalta (RAL 6031)
<b>Cooling</b>	Passively cooled
<b>Earth point</b>	M6 12 mm
<b>Surface treatment chassis</b>	Chromit-Al
<b>Weight</b>	5.8 kg (12.8 lbs)
<b>MTBF</b>	> 56,000 h
<b>CE</b>	Compliant

## Environmental Specification

<b>Functional shock - Operating</b>	MIL-STD-810H, Method 516.8, Procedure I - Functional shock. Table 516.8-IV, Terminal peak sawtooth pulse, Ground material 40 g 11 ms
<b>High temperature - Operating</b>	MIL-STD-810H, Method 501.7, Procedure II - Operation 60 °C (140 °F)
<b>High temperature - Storage</b>	MIL-STD-810H, Method 501.7, Procedure I - Storage 71 °C (160 °F)
<b>Humidity</b>	MIL-STD-810H, Method 507.6, Procedure II - Aggravated 95 ± 4% RH Ten 24-hour cycles
<b>IP Class (Solid Particle Protection)</b>	IP Class 6X
<b>IP Class (Water)</b>	IP Class X7
<b>Low air pressure - Rapid decompression</b>	MIL-STD-810H, Method 500.6, Procedure III - Rapid decompression 2,438 m (8,000 ft) 12,192 m (40,000 ft)
<b>Low air pressure - Operating</b>	MIL-STD-810H, Method 500.6, Procedure II - Operation/air carriage 4,572 m (15,000 ft)
<b>Low temperature - Operating</b>	MIL-STD-810H, Method 502.7, Procedure II - Operation -40 °C (-40 °F)
<b>Low temperature - Storage</b>	MIL-STD-810H, Method 502.7, Procedure I - Storage -46 °C (-50.8 °F)
<b>Noise level</b>	Maximum noise level of 40 dB SPL A-weighting at 1 m (3.3 ft) distance
<b>Salt fog</b>	MIL-STD-810H, Method 509.7 5 ± 1% (by weight) Two cycles, 24 h wet + 24 h dry / cycle
<b>Temperature shock - Operating</b>	MIL-STD 810H, Method 503.7, Procedure I-C, - Multi-cycle shocks from constant extreme temperature 55 °C (131 °F) -40 °C (-40 °F)
<b>Vibration - Helicopter</b>	MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter

<b>Vibration - Loose cargo</b>	MIL-STD-810H, Method 514.8, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo
<b>Vibration - Tracked vehicle</b>	MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 20 - Ground vehicle - ground mobile, Tracked vehicle
<b>Vibration - Wheeled vehicle</b>	MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 20 - Ground vehicle - ground mobile, Wheeled vehicle

## EMC Specification

<b>EMI conducted CE102</b>	MIL-STD-461F, Method CE102, Conducted emissions, power leads BASIC CURVE 10 kHz - 10 MHz
<b>EMI radiated RE102</b>	MIL-STD-461F, Method RE102, Radiated emissions, electric field Navy Mobile & Army 2 MHz - 18 GHz
<b>EMS conducted CS101</b>	MIL-STD-461F, Method CS101, Conducted susceptibility, power leads CURVE #1 30 Hz - 150 kHz
<b>EMS conducted CS114</b>	MIL-STD-461F, Method CS114, Conducted bulk susceptibility Army, Ground 10 kHz - 200 MHz
<b>EMS conducted CS115</b>	MIL-STD-461F, Method CS115, Conducted susceptibility, bulk cable injection, impulse excitation
<b>EMS conducted CS116</b>	MIL-STD-461F, Method CS116, Conducted susceptibility, damped sinusoidal transients, cables and power leads 10 kHz - 100 MHz
<b>EMS radiated RS103</b>	MIL-STD-461F Army 2 MHz - 18 GHz 50 V/m
<b>ESD</b>	EN61000-4-2:2009 Level 3 EN55024:1998 Performance criteria B + A1:2001 + A2:2003