MilDef DR13

Rugged tablet

The MilDef DR series have served many customers for years showing the benefit of form, fit and function.

MilDef DR13 is the 6th generation and continues with the same form factor which saves a lot of investment regarding accessories like cables and different mounts if you plan to replace an older DR series tablet.

The tablet comes with a high brightness display, powerful Intel® Core™ i7 CPU and up to 32GB of RAM. Thanks to its heritage, MilDef can offer a wide range of accessories and reuse customization done on previous generations.

Customizable

Are you looking for features and functions beyond the standard solutions offered by large commercial manufacturers? MilDef products are designed to enable customization to your specific program requirements, e.g. connectors, chassis modifications, mounting solutions, etc. Contact your nearest MilDef Sales Office and we will help you to find a solution that meets your requirements.

Guaranteed performance

All MilDef products come with comprehensive lifecycle sustainment support to ensure your equipment maintains peak performance for many missions to come. We also guarantee the availability of spare parts for 5 years after product end-of-life.

Features

- Intel® Core™ i7-7600
- 32 GB RAM
- 8.4" Resistive Single-Touch display
- Removable SSD & battery
- Programmable Function keys
- Docking connector
- WiFi, Bluetooth, & GNSS (optional)
- Magnesium Case
- Ground Army (optional)
- Water and dust resistant (IP54)

MilDef DR13

Technical Specification

CPU	Intel® Core™ i7-7600U Processor
Display	8.4" XGA (1024 x 768) with optical bonding Brightness: typical ~750 nits
Touch screen	Single-Touch Resistive type
Invisible Mode On/Off	*optional*
Case	Magnesium alloy

Software
Operating system	Windows 10

Memory
RAM	Up to 32 GB DDR4 2400/2666 MHz
Storage	2.5" SATAIII SSD (removable)

Graphics
GPU	Intel® HD Graphics 620

Battery
Primary	10.8V / 5300 mAh Li-Ion
Secondary	10.8V / 9100 mAh Li-Ion *optional*

Sound
Audio	HD Audio

Security & Management
TPM	*TPM2.0 optional*

Interfaces
Ethernet	1x Ethernet 1000Base-T via RJ45 (2nd Ethernet via docking connector) *optional*
WIFI/Bluetooth	802.11 a/b/g/n/ac *optional* Bluetooth 5.0 *optional*
GNSS	Ublox Neo-M8N GPS *optional*
USB	2x USB 3.1 Gen 1 Type A
Express card slot	Yes
SIM card slot	Yes
Docking port	Yes
Speaker	Stereo Speakers
Serial	1x DB9 COM*
Function buttons	- 4 function keys (F1-F4) - Power button - Minus (-) & plus (+) sign - Arrow keys - Function Backlight - Esc, Ctrl, Alt, Del, Fn & Enter - Brightness

Technical Specification (cont.)

Size & Weight
Dimensions with bumpers (W x D x H)	250 x 190 x 45.2 mm (9.84 x 7.48 x 1.78 Inch)	
Weight	2,3 kg (5.1 lbs)	

Temperature Range
Operational DC	-20 °C to +50 °C (-4 °F to +122 °F) Cold boot via AC mode
	Extended temperature option -30 °C + 60 °C (-22 °F to +140 °F)
	Battery charge between 0 °C to +45 °C (+32 °F to +113 °F)
Operational Battery	-10 °C to +55 °C (+14 °F to +131 °F)
Storage	-40 °C to +70 °C (-40 °F to +160 °F)

Reliability
MTBF (Ground Benign)	62 722 hours
MTTR	11.7623 minutes

Power
Power input	12- 32 V_{DC} w. surge protector
Operating time	6 hours on battery (JEITA Ver 1.0)
Power consumption	Idle: 15W Max: 90W
AC Adapter	Please see the accessories section

Standards
CE / FCC	Yes / Yes
REACH	Yes
Environment	MIL-STD-810G IP54
EMC/EMI	MIL-STD-461G Ground Navy *optional* MIL-STD-461G Ground Army *optional*

Warranty
Warranty	5 years

Customization

Need anything not included in the data sheet? MilDef products are designed to enable customization to your specific program requirements. Please contact your MilDef sales team member to find the best solution for your requirements.

* Can be selected via BIOS RS232/RS422/RS485

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Accessories & Options

AC/DC Adapters

AC Adapter 90W (EU) – Indoor Use	110/220VAC (100~240 V_{AC}), 50/60 Hz
AC Adapter 90W (US) – Indoor Use	110/220VAC (100~240 V_{AC}), 50/60 Hz
AC Adapter 90W Ground Army – Indoor Use (EU)	110/220VAC (100~240 V_{AC}), 50/60 Hz
AC Adapter 90W Ground Army – Indoor Use (US)	110/220VAC (100~240 V_{AC}), 50/60 Hz
AC90 – AC adapter 90W Ground Navy (IP65, MIL-STD-810G, MIL-STD-461F & Wide temp)	110/220VAC (90~264 V_{AC}), 50/60 Hz or 400Hz
AC90 – AC adapter 90W Ground Army (IP65, MIL-STD-810G, MIL-STD-461F & Wide temp)	110/220VAC (90~264 V_{AC}), 50/60 Hz or 400Hz

Charger

Multi battery charger	Can charge two primary and two secondary battery.

Mounting & Transport

Docking and mounting solutions	Please get in contact with your MilDef sales office for options
Bag / Backpack	Please get in contact with your MilDef sales office for options
Stand unit	Can hold unit and Docklight with adjustable view angle.

Operating system

Windows 10 LTSC	

Environmental Specification

Low Air pressure	
Low air pressure – Rapid Decompression MIL-STD-810G w/ change 1, Method 500.6, Procedure I - Storage/Air Transport	12.192 m / 40.000 ft
Low air pressure - Operating MIL-STD-810G w/ change 1, Method 500.6, Procedure II - Operation/Air Carriage	4.572 m / 15.000 ft
IP Class	
IP	IP54
Freeze/Thaw	
Freeze/Thaw – Operational MIL-STD-810G w/ change 1, Method 524.1, Procedure III - Rapid Temperature Change	According to method and procedure
Humidity	
Humidity – Storage MIL-STD-810G w/ change 1, Method 507.6, Procedure II (Aggravated) - Figure 507.6-7	24-hours per cycle / Total of 10 cycles Between 30 °C (86 °F) and 60°C (140 °F) with the relative humidity at 95 % constant
Rain	
Rain – Operating MIL-STD-810G w/ change 1, Method 506.6 Procedure II	276 kPa (40 psig) 5-surfaces 40-minutes/surface
Shock	
Functional Shock - Operating MIL-STD-810G w/ change 1, Method 516.7-10, Procedure I - Figure 516.7-IV	Table 516.7-IV Terminal-peak sawtooth shock pulse 40 g, 11ms
Salt Fog	
Salt fog MIL-STD-810G w/ change 1. Method 509.6	Salt concentration5 % +- 1 % (by weight) 24 h wet + 24 h dry /cycle Total 2 cycles / 96 hours
Temperature	
Low temperature - Operating MIL-STD-810G w/ change 1, Method 502.6, Procedure II – Operation	-20 °C / -4 °F (optional -30 °C / -22 °F)
Low temperature - Storage MIL-STD-810G w/ change 1, Method 502.6, Procedure I – Storage	-40 °C / -40 °F
High temperature - Operating MIL-STD-810G w/ change 1, Method 501.6, Procedure II – Operation	50 °C / 122 °F
High temperature - Storage MIL-STD-810G w/ change 1, Method 501.6, Procedure I – Storage	71 °C / 160 °F
Temperature Shock MIL-STD 810G w/ change 1, Method 503.6, Procedure I–A (Figure 503.6-3)	-20 °C to 60 °C (0 °F to / 140 °F)
Vibrations	
MIL-STD-810G w/ change 1, Method 514.7, Category 20 (Ground Vehicles-ground mobile)	Table 514.7C-V (Composite wheeled vehicle vibration exposure) Figure 514.7C-4, 60-minutes/axis
MIL-STD-810G w/ change 1, Method 514.7, Category 14 (Rotary wing aircraft-helicopter)	Table 514.7D-IIIa(OH-58AC), Figure 514.7D-3, 60-minutes/axis
MIL-STD-810D, Method 514.6 Procedure I, Category 20 (Tracked Vehicle)	Figure 514.6D-8, (M548) 60-minutes/axis

EMC Specification (optional)

MIL-STD-461G

MIL-STD-461G, Method CE101	Conducted Emissions, Power Leads 30 Hz to 10 kHz
MIL-STD-461G, Method CE102	Conducted Emissions, Power Leads 10 kHz to 10 MHz
MIL-STD-461G, Method CS101	Conducted susceptibility, power leads 30 Hz to 150 kHz Curve #1
MIL-STD-461G, Method CS114	Bulk Cable Injection 10 kHz to 200 MHz
MIL-STD-461G, Method CS115	Conducted susceptibility, bulk cable injection, impulse excitation 30 Hz for one minute
MIL-STD-461G, Method CS116	Conducted Susceptibility, Damp Sinusoidal Transients, Cables and Power Leads, 10 kHz to 100 MHz
MIL-STD-461G, Method CS118	Personnel borne electrostatic discharge – All (ESD) Contact Discharge 4 KV / Air Discharge 8 KV
MIL-STD-461G, Method RE101	Radiated Emissions, Magnetic Field 30 Hz to 100 kHz
MIL-STD-461G, Method RE102	Radiated Emissions, Electric Field 2 MHz to 18GHz
MIL-STD-461G, Method RS101	Radiated Susceptibility, Magnetic Field 30 Hz to 100 kHz
MIL-STD-461G, Method RS103	Radiated Susceptibility, Electric Field 2 MHz ~ 1 GHz 10 V 1 GHz ~ 18 GHz 50 V