

MilDef DK13



Rugged 12" tablet

The MilDef DK13 offers a rugged 12" tablet with a powerful Intel® Core™ i7 processor and resistive touch display. It has been designed for tactical military environments where reliability and performance are key. The DK13 is ideally suited for mounted, dismountable and dismounted applications requiring real-time Situational Awareness and forward-deployed C2 Battle Management capability. Vehicle mounting kits and wired/wireless dismountable communication options are available, which may be tailored to specific program requirements.

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
- 16 GB RAM
- 12.1" Resistive Single-Touch display
- Removable SSD & battery
- Programmable Function keys
- Docking connector
- WiFi, BT, &GPS (optional)
- Magnesium Case
- Up to 9 hours battery life
- MIL-STD-810G
- Ground Army (optional)
- Water and dust resistant (IP65)

Technical Specification	
CPU	Intel® Core™ i7-7600U Processor
Operating system	Windows 10
BIOS	AMI
RAM	8/16GB DDR4 2133 MHz
Graphic	Intel® HD Graphics 620
Storage	2.5" SATAIII SSD (removable)
Display	12.1" XGA (1024 x 768) with optical bonding Resistive Single-Touch Screen 650 nits Invisible Mode On/Off
WiFi/Bluetooth (optional)	- Intel® Dual Band Wireless AC9260 802.11 a/b/g/n/ac - Bluetooth 5.0
GPS (optional)	Ublox Neo-M8N
Sound	HD Audio and Stereo Speakers
Security	TPM2.0 (optional)
OS	Windows 10
MTBF/MTTR (Ground Benign)	MTBF: 63,253 Hours MTTR: 12.675 minutes
Power Input	12- 32 VDC w. built-in vehicle adapter (including surge protector)
Power consumption	31 W (typical)
AC Adapter (optional)	90W AC 100V-240V 50/60Hz
Battery	10.8V / 5800 mAh Li-Ion (standard) 10.8V / 8700 mAh Li-Ion (optional)
Operating time	9 hours
Case	Magnesium
Power consumption	Idle (100% brightness): TBD W Full Load (incl. charging): TBD W
Dimensions (W x D x H)	310 x 255 x 54 mm
Weight	2,8 kg***
Temperature range: (operational)	-20°C to +50°C* (-4°F to +122°F)
Temperature range: (storage)	-40°C to +71° (-40°F to +158°F)
Certifications	- CE/FCC - IP65 - MIL-STD-810G - MIL-STD-461G** - REACH - RoHS
Accessories	AC adapter, Docking station, Secondary Battery, Multi Battery charger, Carrying solutions.
Other	More options and accessories are available at request.

* Option for -30°C is available

** Option for Ground Army is available

*** Weight incl. RAM, GPS, Wireless, 2nd GLAN, Battery and SSD

**** Can be selected via BIOS RS232/RS422/RS485

Connector Interfaces	
Function buttons (front)	- 4 function keys (F1-F4) - Power button - TrackPoint and left mouse button - Minus (-) & plus (+) sign - Arrow keys - Function Backlight - Esc, Ctrl, Alt, Del, Fn & Enter - Brightness
LED Indicators (front)	- Power/S3 (Green/Red) - SSD/Heater (Green/Orange) - Charge/Battery Low - (Orange/Flashing Orange) - RF Devices (Blue)
Interfaces (left)	1x Gigabit LAN (RJ45) 1x USB 3.1 Gen 1 (Type A) 1x Multi Bay: - 1x Express card slot - 1x SIM card slot - 1x SD card slot
Interfaces (right)	1x DC in (Amphenol 62IN Series) 1x COM1 (DB9) ****
Interface (bottom)	1x Docking port with: - 1x VA (19V) - 1x VCC (3.3V 75V) - GND - 1x VGA - PS2 (KBD/Mouse) - IEEE 1394a (disabled/customization) - 1x DVI - 1x GLAN (optional) - 1x COM2 (TTL) - 1x COM3 (RS232) - USB2.0 - Line in / speaker - Mic
Interfaces (internal)	- 2x Mini PCIe Full-size slot - 1x M.2 2230 E key (for WiFi/BT) - 4x USB 2.0 - 2x USB3.1 Gen1 - 1x Serial Port
Interfaces (rear)	2 nd Battery Connector



Environmental Specification

Temperature

Low temperature - Operating MIL-STD-810G w/Change 1, Method 502.6 <i>Procedure II – Operation</i>	-20 °C / -4 °F
Low temperature - Storage MIL-STD-810G w/Change 1, Method 502.6 <i>Procedure I – Storage</i>	-40 °C / -40 °F
High temperature - Operating MIL-STD-810G w/Change 1, Method 501.6 <i>Procedure II – Operation</i>	50 °C / 122 °F
High temperature - Storage MIL-STD-810G w/Change 1, Method 501.6 <i>Procedure I – Storage</i>	70 °C / 158 °F
Temperature Shock – Non-Operating MIL-STD 810G w/Change 1, Method 503.6 <i>Procedure I–C (Figure 503.6-3)</i>	-20°C / -4°F to 60°C / 140°F

Low Air pressure

Low air pressure – Rapid Decompression MIL-STD-810G, Method 500.6, <i>Procedure III - Rapid Decompression</i>	12.192 m / 40.000 ft (Storage)
Low air pressure - Operating MIL-STD-810G, Method 500.6, <i>Procedure II - Operation/Air Carriage</i>	4.572 m / 15.000 ft

IP Class

IP	IP65
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Freeze/Thaw

Freeze/Thaw – Operational MIL-STD-810G, Method 524.1 <i>Procedure III - Rapid Temperature Change</i>	According to method and procedure
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Humidity

Humidity – Storage MIL-STD-810G, Method 507.6 <i>Procedure II (Aggravated) - Figure 507.6-7</i>	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
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Rain

Rain – Operating MIL-STD-810G, Method 506.6 <i>Procedure II</i>	276kPa(40psig) 5-surfaces 40-minutes/surface
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Shock

Transit Drop Test - Storage MIL-STD-810G, Method 516.6 <i>Procedure IV – Transit drop test</i>	122cm / 48" Onto each face, edge and corner Total of 26 drops
Functional Shock - Operating MIL-STD-810G, Method 516.7 <i>Procedure I - Figure 516.7-10</i>	Table 516.7-IV Terminal-peak sawtooth shock pulse 40g, 11ms

Salt Fog

Salt fog MIL-STD-810G w/Change 1, Method 509.6	5 % +- 1 % (by weight) 24 h wet + 24 h dry /cycle Total 2 cycles / 96 hours
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Vibrations

Vibration - Operational MIL-STD-810G, Method 514.7 <i>Category 20 - (Ground Vehicles-ground mobile)</i>	Table 514.7C-VI Composite wheeled vehicle vibration exposure Figure 514.7C-4, 60-minutes/axis
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EMC Specification

MIL-STD-461G

MIL-STD-461G, Method CE101	Conducted Emissions, Power Leads 30Hz to 150kHz
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
MIL-STD-461G, Method CS114	Bulk Cable Injection 10kHz to 200MHz
MIL-STD-461G, Method CS115	Conducted susceptibility, bulk cable injection, impulse excitation
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)
MIL-STD-461G, Method RE101	Radiated Emissions, Magnetic Field 30Hz to 100kHz
MIL-STD-461G, Method RE102	Radiated Emissions, Electric Field 10kHz to 18GHz
MIL-STD-461G, Method RS101	Radiated Susceptibility, Magnetic Field 30Hz to 100kHz
MIL-STD-461G, Method RS103	Radiated Susceptibility, Electric Field 2MHz~18GHz