

# 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 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
- Wi-Fi, BT, & GPS (optional)
- Magnesium Case
- Up to 9 hours battery life
- MIL-STD-810H
- Ground Army (optional)
- Water and dust resistant (IP65)

## Technical Specification

CPU	Intel® Core™ i7-7600U Processor
Display	12.1" XGA (1024 x 768) Brightness: 650 nits
Touch screen	Single-Touch
Invisible Mode On/Off	Yes
Case	Magnesium
<b>Software</b>	
Operating system	Windows 10
<b>Memory</b>	
RAM	Up to 32 GB DDR4 2133 MHz
Storage	2.5" SATAIII SSD (removable)
<b>Graphics</b>	
GPU	Intel® UHD Graphics 620
<b>Battery</b>	
Primary	10.8V / 9125 mAh Li-Ion
Secondary	10.8V / 8700 mAh Li-Ion <i>optional</i>
<b>Sound</b>	
Audio	HD Audio
<b>Security &amp; Management</b>	
TPM	TPM2.0 <i>optional</i>
<b>Interfaces</b>	
Ethernet	1x Ethernet 1000Base-T
WiFi/Bluetooth	802.11 a/b/g/n/ac <i>optional</i> Bluetooth 5.0 <i>optional</i>
GNSS	Ublox Neo-M8N GPS/GLONASS <i>optional</i>
USB	1x USB 3.1 Gen 2 (w. fast charging) 1x USB 3.1 Gen 2
Express card slot	Yes
SIM card slot	Yes
Docking port	Yes
Speaker	Stereo Speakers
Serial	1x COM*
Function buttons	<ul style="list-style-type: none"> <li>- 4 function keys (F1-F4)</li> <li>- Power button</li> <li>- TrackPoint and left mouse button</li> <li>- Minus (-) &amp; plus (+) sign</li> <li>- Arrow keys</li> <li>- Function Backlight</li> <li>- Esc, Ctrl, Alt, Del, Fn &amp; Enter</li> <li>- Brightness</li> </ul>

## Technical Specification (cont.)

<b>Size &amp; Weight</b>	
Dimensions with bumpers (W x D x H)	310 x 255 x 54 mm (12.2 x 10.0 x 2.1 inch)
Weight	2,8 kg **
<b>Temperature Range</b>	
Operational DC	-20°C to +50°C (-4°F to +122°F) (-30°C <i>option</i> available)
Operational Battery (Standard Battery)	Battery is charging between -10°C to +55°C (+14°F to +131°F)
Storage	-40°C to +71° (-40°F to +160°F)
<b>Reliability</b>	
MTBF (Ground Benign)	63 253h
MTTR	12.675 minutes
<b>Power</b>	
Power input	12- 32 VDC w. surge protector
Operating time	9 hours
Power consumption (typical)	31W (w/o battery / LCD 100%)
AC Adapter	Please see the accessories section
<b>Standards</b>	
CE / FCC	Yes / Yes
REACH	Yes
Environment	MIL-STD-810H IP65
EMC/EMI	MIL-STD-461G Ground Navy <i>optional</i> MIL-STD-461G Ground Army <i>optional</i>
<b>Warranty</b>	
Warranty	5 years
<b>Customization</b>	
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

\*\* Weight incl. RAM, GPS, Wireless, 2<sup>nd</sup> GLAN, Battery and SSD



## Accessories & Options

### AC/DC Adapters

AC Adapter 90W (EU) – Indoor Use	110/220VAC (100~240 VAC), 50/60 Hz
AC Adapter 90W (US) – Indoor Use	110/220VAC (100~240 VAC), 50/60 Hz
AC Adapter 90W Ground Army – Indoor Use (EU)	110/220VAC (100~240 VAC), 50/60 Hz
AC Adapter 90W Ground Army – Indoor Use (US)	110/220VAC (100~240 VAC), 50/60 Hz
ACS90 – AC adapter 90W Ground Navy (IP65, MIL-STD-810G, MIL-STD-461F & Wide temp)	110/220VAC (90~264 VAC), 50/60 Hz or 400Hz
ACS90 – AC adapter 90W Ground Army (IP65, MIL-STD-810G, MIL-STD-461F & Wide temp)	110/220VAC (90~264 VAC), 50/60 Hz or 400Hz

### Chargers

Multi battery charger	Charger for 2x primary and 1x Secondary batteries
-----------------------	---

### 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
Carrying Handle	Standard option.
Stand unit	Can hold unit and Docklight with adjustable view angle.

### Operating system

Windows 10

## Environmental Specification

### Low Air pressure

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

### IP Class

IP	IP65
----	------

### Freeze/Thaw

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

### Humidity

Humidity – Storage MIL-STD-810H, 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
---	---

### Rain

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

### Shock

Functional Shock - Operating MIL-STD-810H, Method 516.8 <i>Procedure I - Figure 516.8-10</i>	Table 516.8-IV Terminal-peak sawtooth shock pulse 40g, 11ms
--	---

### Salt Fog

Salt fog MIL-STD-810H Method 509.7	Salt concentration of 5 % +- 1 % 24 h wet + 24 h dry /cycle Total 2 cycles / 96 hours
---------------------------------------	---

### Temperature

Low temperature - Operating MIL-STD-810H Method 502.7 <i>Procedure II – Operation</i>	-20 °C / -4 °F (optional -30 °C / -22 °F)
Low temperature - Storage MIL-STD-810H Method 502.7 <i>Procedure I – Storage</i>	-40 °C / -40 °F
High temperature - Operating MIL-STD-810H Method 501.7 <i>Procedure II – Operation</i>	50 °C / 140 °F
High temperature - Storage MIL-STD-810H Method 501.7 <i>Procedure I – Storage</i>	71 °C / 160 °F
Temperature Shock – Non-Operating MIL-STD 810H Method 503.7 <i>Procedure I–A (Figure 503.7-1)</i>	-20°C / 0°F to 60°C / 140°F

### Vibrations

Vibration - Operating	
A. MIL-STD-810H, Method 514.8 <i>Category 20</i> - Ground Vehicles-ground mobile Table 514.8C-VII Composite wheeled vehicle vibration exposure Figure 514.8C-6, 60-minutes/axis	
B. MIL-STD-810H, Method 514.8 <i>Category 14</i> - Rotary wing aircraft-Helicopter Table 514.8D-IIIa OH-58AC, Figure 514.8D-4, 60-minutes/axis	
C. MIL-STD-810D, Method 514.6 <i>Procedure I</i> , <i>Category 20</i> - Tracked Vehicle Figure 514.6D-8, (M548) 60-minutes/axis	
Vibration Storage MIL-STD-810H, Method 514.8 <i>Category 24 - General minimal integrity</i> 60-minutes/axis	



## EMC Specification (optional)

### MIL-STD-461G

MIL-STD-461G, Method CE101	Conducted emissions, power leads 30Hz to 10kHz
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	Conducted susceptibility, 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 to 18GHz