

# Panther

full rugged

# DK13

12.1" tablet



WATER

SAND



FROST

HEAT



SHOCK

DROP



FORM  
FACTOR

The Panther Tablet PC's are characterized by the extraordinary possibility of customization and an enormous robustness. The variety of modules and possible interfaces available with industrial or military connectors is huge. Exclusive components with extended temperature range are used for the Panther tablets, the interfaces are decoupled from the mainboard. This enables the devices to be used reliably at extreme ambient temperatures and vibrations.

## Technical specification

<b>Display</b>	12.1" XGA (1024x768) <ul style="list-style-type: none"><li>• typ. 600 cd/m<sup>2</sup></li><li>• LED backlight</li><li>• resistive touch screen</li><li>• optical bonding</li></ul>	<b>Interfaces</b>	2x USB3.1 Gen.1 (fast charge), 1x Gbit LAN (RJ45), 1x serial (DB9), 1x DC-In (MIL), 1x docking connector Multibay: 1x ExpressCard/54, 1x SIM- card slot, 1x SD-card slot
<b>Chipset</b>	Intel® Kaby Lake-U platform	<b>Power supply</b>	<ul style="list-style-type: none"><li>• Li-ion battery, 11.4 V, 8700 mAh</li><li>• internal vehicle adapter 12-32 V<sub>DC</sub> with surge protection</li><li>• AC-adapter 90 W, 19 V<sub>DC</sub> 3.4 A, 100~240 V<sub>AC</sub> 50/60 Hz</li></ul>
<b>CPU</b>	Intel® Core™i7-7600U™, Kaby Lake, 2.8 GHz (3.9 GHz max. Turbo Frequency)	<b>OS</b>	Windows 10
<b>Graphics</b>	Intel® HD Graphics 620	<b>Certification</b>	CE/FCC/DOE, WEEE, REACH, RoHS2.0, IP65, MIL-STD-810G, MIL-STD-461G
<b>Memory</b>	up to 16 GB DDR4 2133 MHz SO-DIMM (1x slot)	<b>Housing</b>	rugged magnesium housing
<b>Storage</b>	exchangeable 2.5" SATA3 HDD (500 GB Std.) >> optional with SATA SSD (MLC or SLC)	<b>Colour</b>	military green (NATO olive / RAL6031HR), black
<b>Audio</b>	HD audio, stereo speaker	<b>Dimensions</b>	310 x 255 x 54 mm (L x D x H)
<b>Keypad</b>	ON/OFF, LCD brightness, standby, 6 free programmable funktion keys, trackpoint mouse device with left mouse button	<b>Weight</b>	2.5 kg
<b>Security</b>	TPM2.0 module		

MIL-STD-810G	operating	storage
<b>Altitude</b> Method 500.6, (Procedure I, II)	4572 m (15000 ft)	12192 m (40000 ft)
<b>Temperature</b> Method 501.6 & 502.6, (Procedure I, II)	-20°C to +50°C -30°C with heater	-40°C to +70°C
<b>Temperature Shock</b> Method 503.6, (Procedure I)	N/A	-20°C to +60°C
<b>Rain</b> Method 506.6, (Procedure I)	N/A	276 kPa, 0.5 - 4.5 mm diameter
<b>Humidity</b> Method 507.6, (Procedure I)	N/A	ten 24 h test cycles 95 % (30°C - 60°C)
<b>Salt fog</b> Method 509.6, (Procedure I)	N/A	5+-1 % salt concentration, 24 h wet + 24 h dry/cycle, Total: two test cycles / 96 h
<b>Vibration</b> Method 514.7, Category 1 Method 514.7, Category 14 (Procedure I) Method 514.7, Category 20 (Procedure I)	Tracked Vehicle Vibration Helicopter Vibration OH58A/C Comp. Wheeled Vehicle Vibration	Tracked Vehicle Vibration Helicopter Vibration OH58A/C Comp. Wheeled Vehicle Vibration
<b>Shock / drop</b> Method 516.7, (Procedure I)	40 g, 11 ms	40 g, 11 ms

MIL-STD 461G		
<b>CE101</b>	30 Hz ~ 10 KHz	CE101-4 Curve #1
<b>CE102</b>	10 KHz ~ 10 MHz	115 V, Basic Curve +6db
<b>CS101</b>	30 Hz ~ 150 KHz	CS101-1 Curve #1
<b>CS114</b>	10 KHz ~ 200 KHz	Curve #5-5-5
<b>CS115</b>		All
<b>CS116</b>	10 KHz to 100 KHz	I <sub>max</sub> = 10 A
<b>RE101</b>	30 Hz ~ 100 KHz	RE101-2, Navy
<b>RE102</b>	10 KHz ~ 18 GHz	RE102-4, Navy Fixed & Air Force
<b>RS101</b>	30 Hz ~ 100 KHz	RS101-1, Navy
<b>RS103</b>	2 MHz ~ 40 GHz	2 MHz ~ 8 GHz, 50 V/m



Panther DK13 Interfaces



Panther DK13 with OCR Reader



Panther DK13 with Dual Smart Card Reader



Panther DK13 vehicle installation

## Options

- WiFi module (Intel® Wireless-AC 9260)
  - WLAN 802.11 a/b/g/n/ac
  - Bluetooth 5.0
- GPS module u-blox Neo-M8N (GPS/GLONASS)
- 2nd GBit LAN 10/100/1000 MBit
- fiber optic LAN 100/1000 MBit
- display filter for night vision equipment
- heater for -30°C operating
- military round connectors for nearly all interfaces on request

## Optional certifications & modifications

- MIL-STD-461G certification
  - Ground Army (Navy mobile & Army)
- BSI Zone 1 / SDIP 27 Level B

## Optional accessories

- second Li-ion battery 10.8 V, 8700 mAh
- multi battery charger
- sunshade (glare/sight & display protector)
- transportation bag
- StandUnit (desktop stand / fixation)
- vehicle fixation / RAM Mount
- DockLite DL10 (port replicator) for docking connector as standard or MIL version
  - 250 x 37 x 61 mm
  - ca. 0.45 kg
  - interfaces:
    - 2x serial DB9, 4x USB2.0 (2x standard, 2x sealed),
    - 1x VGA (DB15), 2x audio (in & out), 1x DC-In,
    - 1x Gbit LAN

v1.4