

# M133KML(HB), 13.3-inch Ultra Rugged Tablet

Military-Grade Tablet Ready for Challenging Tasks and Tough Environments

M133KML (HB) is the next generation of the 13.3-inch rugged tablet with robust set of features designed to withstand industrial use while providing high tech solutions that increase productivity, improve safety, and reduce operational costs. The processing power comes from Intel's 7th generation Core i5-7200U processor and the tablet features a brilliant, wide viewing angle with direct optical bonding, projected capacitive touch screen, which is outdoor viewable and offers a 1920 x 1080 resolution display. Equipped with a built-in kickstand, the M133KML (HB) is a powerful workstation with reliable performance in a mobile and ultra-rugged design.



## Highlights

- 7<sup>th</sup> Gen. Core™ i5-7200U, 2.5 GHz (turbo up to 3.1 GHz)
- 13.3" 1920 x 1080 Resolution Transflective TFT-LCD Panel
- With daylight-readable screen 500 nits and optical bonding for clarity increasing and readability enhancing
- Optional high brightness 800 nits
- Adjustable Kickstand that is Convertible to a handle (Optional)
- With IP65 dust and water-resistant certification
- Magnesium Alloy Housing with All-Around Elastomeric Rubber
- MIL-STD-38999 connector for LAN/ USB2.0 and Power/ RS232/422/485 Input
- Fully Sealed and Fanless Thermal Design
- MIL-STD-810G Compliant

# M133KML(HB), 13.3-inch Ultra Rugged Tablet

Military-Grade Tablet Ready for Challenging Tasks and Tough Environments

## Display Specification

Size	13.3-inch
Resolution	1920 x 1080
Panel Brightness	500 nits with Optical Bonding (Optical 800 nits)
Touch	Multi-touch Projected Capacitive with Glove/Rain/Stylus Modes Active Stylus Support
Contrast Ratio	1000:1
Viewing Angle	89/89/89/89
Technology	Intel HD Graphics (built-in CPU) video controller

## System Specification

Processor	Intel® Core™ i5-7200U 2.5 GHz (Turbo up to 3.10 GHz)
System Memory	4GB SODIMM DDR4-2400 (up to 16GB)
Storage 1	1 x 128GB M.2 SSD (up to 512GB)
Storage 2	Optional M.2 SSD (up to 512GB)
Operating System	Windows 10 IoT Enterprise

## Wireless Communication

WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth
GPS	GPS/GLONASS
WWAN	Optional 4G/ LTE or 3G

## Interface

HDMI Connector	1 x HDMI
Reset	1 x Reset Button
SD Card Slot	1 x Micro SD Slot
Audio Jack	1 x Headphone Combo Jack
USB Type-C Connector	1 x USB 3.1 Type-C (Gen1) 2
USB3.0	2 x USB 3.0
RS232 Serial Port	1 x RS232 Serial COM Port
MIL-STD-38999 connector	1 x LAN/USB2.0 Port 1 x Power/RS232/422/485 Port

## Keyboard and Input

Touch	10-point multi-touch, support Hand / Gloves, Rain Mode, and Active Pen
Button	On-screen QWERTY keyboard 7 membrane keys: 1 x power, 1 x menu, 3 x function key (Programmable function key)

## Status Indicators

LED Indicators	Power, Battery, SSD, RF
----------------	-------------------------

## Audio

Microphone	1 x built-in Digital Mic with Noise Cancellation
Speaker	2 x 1 watt speaker

## Cameras

Web Camera	2MP webcam
Rear Camera	5MP rear camera with autofocus and LED light

## Certifications

Certifications	CE, FCC, IC, UL
----------------	-----------------

## Security Function

Security	<ul style="list-style-type: none"><li>Trusted Platform Module (TPM) V2.0 <sup>3</sup></li><li>Computrace theft protection agent <sup>4</sup></li><li>Kensington lock slot</li></ul>
Mobile Device Management	SOTI Mobicontrol compatible

## Mechanical and Environment

Dimension (W x L x H)	338.5 x 240 x 44 mm (13.3 x 9.4 x 1.18 inches) <sup>5</sup>
Housing	Rear Magnesium Alloy Die-Casting Design
Cooling System	Fanless thermal design
Weight	2.4 Kg (Without Kickstand) 2.8 Kg (With Kickstand)
Operating Temperature	-10°C to 50°C (14°F to 122°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Humidity	30% to 80% RH, non-condensing
IP Proof	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete
ESD (Contact/Air)	12kV/12kV

## Power Management

Power Input	24V DC
Battery	7.4V, typ. 10280 mAh Li-Polymer Battery (2S2P) Optional Hot-Swap
Battery Operating Time	11 Hours (BAPCo TabletMark v3)

## Accessories

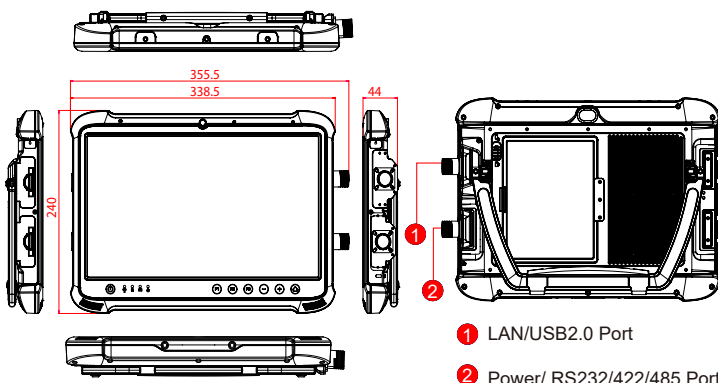
### Standard Accessories

Adapter and Power Cord  
Standard Battery  
Stylus  
Stand with Integrated Handle  
Power/RS232 External Cable  
LAN/USB2.0 External Cable

### Optional Accessories <sup>6</sup>

Shoulder Strap  
Battery Charger  
Active Pen

## Drawing <sup>7</sup>



\*Military 38999 connector for LAN/USB2.0, Power/RS232 port signal



Caution

Do Not Expose the Battery Pack to Excessive Heat, or Extreme Heat (Near Fire, in Direct Sunlight for example)  
Do not expose bare skin to this product when handling this unit in extreme hot or cold environments

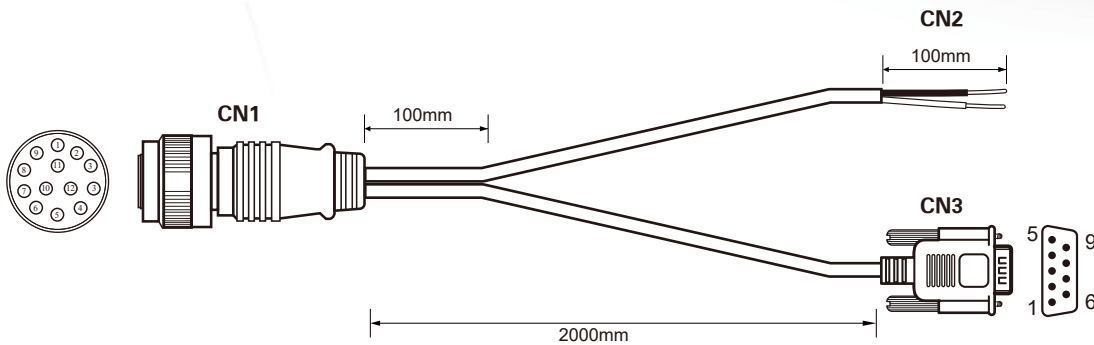
- Total usable memory will be less depending upon actual system configuration.
- The USB Type-C connector follows USB3.0, standard, which does not support Alternate Mode (ALT) or USB Power Delivery (USB-PD)
- TPM 2.0 available upon request.
- Computrace theft protection and SOTI are available upon request.
- Length measurements do not include protrusions. Weight varies with options.
- Accessories and Integrated Options may vary depending on your configuration.
- This is a simplified drawing and some components are not marked in detail.

# M133KML(HB), 13.3-inch Ultra Rugged Tablet

Fully Ultra Rugged Tablet that Can Survive Any Environment and Get Real Work Done

## Pin Definition

### Power/RS232 Cable

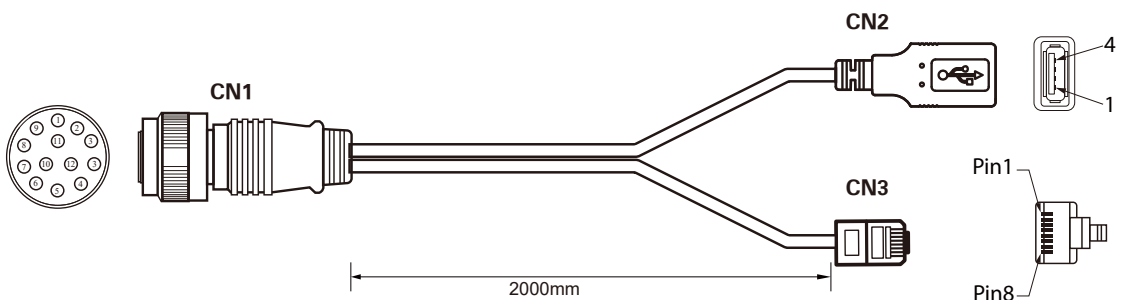


Pin No	Symbols	Color
CN1-1	VCC+	White
CN1-2	VCC-	Black
CN1-3	NC	
CN1-4	NC	
CN1-5	RS232 DCD	No assignation
CN1-6	RS232 RXD	No assignation
CN1-7	RS232 TXD	No assignation
CN1-8	GND	No assignation
CN1-9	RS232 DTR	No assignation
CN1-10	RS232 DSR	No assignation
CN1-11	RS232 RTS	No assignation
CN1-12	RS232 CTS	No assignation
CN1-13	RS232 RI	No assignation

Pin No	Symbols	Color
CN2-1	VCC+	White
CN2-2	VCC-	Black

Pin No	Symbols	Color
CN3-1	RS232 DCD	No assignation
CN3-2	RS232 RXD	No assignation
CN3-3	RS232 TXD	No assignation
CN3-4	GND	No assignation
CN3-5	RS232 DTR	No assignation
CN3-6	RS232 DSR	No assignation
CN3-7	RS232 RTS	No assignation
CN3-8	RS232 CTS	No assignation
CN3-8	RS232 RI	No assignation

### LAN/USB2.0 Cable



Pin No	Symbols	Color
CN1-1	USB 5V	Red
CN1-2	USB GND	Black
CN1-3	USB D-	White
CN1-4	USB D+	Green
CN1-5	DA+	Orange/White
CN1-6	DA-	Orange
CN1-7	DB+	Green/White
CN1-8	DC+	Blue
CN1-9	DC-	Blue/White
CN1-10	DB-	Green
CN1-11	DD+	Brown/White
CN1-12	DD-	Brown
CN1-13	NC	

Pin No	Symbols	Color
CN2-1	USB 5V	Red
CN2-4	USB GND	Black
CN2-2	USB D-	White
CN2-3	USB D+	Green
CN3-1	DA+	Orange/White
CN3-2	DA-	Orange
CN3-3	DB+	Green/White
CN3-4	DC+	Blue
CN3-5	DC-	Blue/White
CN3-6	DB-	Green
CN3-7	DD+	Brown/White
CN3-8	DD-	Brown

Twist

Twist

Twist

Twist

Twist

