# 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  $\times$  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<sup>™</sup> 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



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# Military-Grade Tablet Ready for Challenging Tasks and Tough Environments

### **Display Specification**

13.3-inch Resolution 1920 x 1080

Panel Brightness 500 nits with Optical Bonding (Optical 800 nits)

Multi-touch Projected Capactive Touch

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) 1 x 128GB M.2 SSD (up to 512GB) Storage 1 Storage 2 Optional M.2 SSD (up to 512GB) Windows 10 IoT Enterprise Operating System

#### Wireless Communication

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 I AN/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

2 x 1 watt speaker

#### Cameras

Web Camera 2MP webcam

5MP rear camera with autofocus and LED light

#### Certifications

Certifications CE. FCC. IC. UL

### **Security Function**

Security • Trusted Platform Module (TPM) V2.0 3

Computrace theft protection agent <sup>4</sup>

· Kensington lock slot

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) 5 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

Shock MIL-STD-810G Method 516.6 Procedure I Vibration MIL-STD-810G Method 514.6 Procedure I

MIL-STD-810G Method 516.6, 4 ft to concrete ESD (Contact/Air) 12k\//12k\/

# **Power Management**

Power Input

7.4V, typ. 10280 mAh Li-Polymer Battery (2S2P) Battery

Optional Hot-Swap

Battery Operating Time 11 Hours (BAPCo TabletMark v3)

#### Accessories

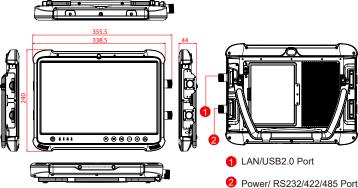
#### **Standard Accessories**

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

Optional Accessories 6

Shoulder Strap Battery Charger Active Pen

#### Drawing 7



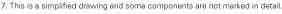
\*Military 38999 connector for LAN/USB2.0, Power/RS232 port signal



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

- 1. 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)
- 3. TPM 2.0 available upon request.
- 4. Computrace theft protection and SOTI are available upon request.
- 5. Length measurements do not include protrusions. Weight varies with options.
- Accessories and Integrated Options may vary depending on your configuration.



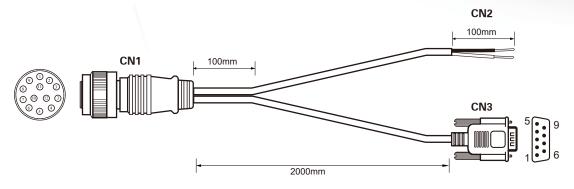


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Fully Ultra Rugged Tablet that Can Survive Any Environment and Get Real Work Done

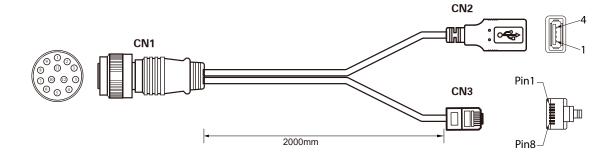
## Pin Definition

# Power/RS232 Cable



Pin No	Symbls	Color	1	Pin No	Symbls	Color
CN1-1	VCC+	White	$\longleftrightarrow$	CN2-1	VCC+	White
CN1-2	VCC-	Black	$\stackrel{\cdot}{\longleftrightarrow}$	CN2-2	VCC-	Black
CN1-3	NC		1			
CN1-4	NC			Pin No	Symbls	Color
CN1-5	RS232 DCD	No assignation	$\longleftrightarrow$	CN3-1	RS232 DCD	No assignation
CN1-6	RS232 RXD	No assignation	$\longleftrightarrow$	CN3-2	RS232 RXD	No assignation
CN1-7	RS232 TXD	No assignation	$\longleftrightarrow$	CN3-3	RS232_TXD	No assignation
CN1-8	GND	No assignation	$\longleftrightarrow$	CN3-4	GND	No assignation
CN1-9	RS232 DTR	No assignation	$\longleftrightarrow$	CN3-5	RS232_DTR	No assignation
CN1-10	RS232 DSR	No assignation	$\left  \longleftarrow \right\rangle$	CN3-6	RS232 DSR	No assignation
CN1-11	RS232 RTS	No assignation	$1 \longleftrightarrow$	CN3-7	RS232 RTS	No assignation
CN1-12	RS232 CTS	No assignation	$1 \leftarrow \longrightarrow$	CN3-8	RS232 CTS	No assignation
CN1-13	RS232_RI	No assignation		CN3-8	RS232_RI	No assignation

# LAN/USB2.0 Cable



Pin No	Symbls	Color	]	Pin No	Symbls	Color	]
CN1-1	USB 5V	Red	$\longleftrightarrow$	CN2-1	USB 5V	Red	
CN1-2	USB_GND	Black	$\longleftrightarrow$	CN2-4	USB_GND	Black	
CN1-3	USB_D-	White	$\longleftrightarrow$	CN2-2	USB_D-	White	Twist
CN1-4	USB_D+	Green	$\longleftrightarrow$	CN2-3	USB_D+	Green	I wist
CN1-5	DA+	Orange/White	$\longleftrightarrow$	CN3-1	DA+	Orange/White	Twist
CN1-6	DA-	Orange	$\longleftrightarrow$	CN3-2	DA-	Orange	H
CN1-7	DB+	Green/White	$\longleftrightarrow$	CN3-3	DB+	Green/White	
CN1-8	DC+	Blue	$\longleftrightarrow$	CN3-4	DC+	Blue	Twist Twist
CN1-9	DC-	Blue/White	$\longleftrightarrow$	CN3-5	DC-	Blue/White	I I I WIST
CN1-10	DB-	Green	$\longleftrightarrow$	CN3-6	DB-	Green	]
CN1-11	DD+	Brown/White	$\longleftrightarrow$	CN3-7	DD+	Brown/White	Twist
CN1-12	DD-	Brown	$\longleftrightarrow$	CN3-8	DD-	Brown	
CN1-13	NC						FE CE ROHS COMPLIANT

