

# R08IWK8M-RTU1ML, 8.4-inch Ultra Rugged Tablet

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

The R08IWK8M-RTU1ML is an 8.4-inch ultra-rugged tablet with a robust set of features designed to handle the toughest tasks while providing high tech solutions that increase productivity, improve safety, and reduce operational costs. The processing power comes from Intel's 8th generation Core i5-8265U Whiskey Lake in a magnesium aluminum housing with protective rubber for military standard ruggedness. The R08IWK8M-RTU1ML is a no-nonsense, field ready ultra-rugged tablet that can act as a powerful workstation in an easy to use package.



### Highlights

- 8<sup>th</sup> Gen. Intel® Core™ i5-8265U, 1.6 GHz (turbo up to 3.90 GHz)
- 8.4" 800 x 600 Resolution Transflective TFT-LCD Panel
- With daylight-readable screen 600 nits optical bonding for clarity increasing and readability enhancing
- Ecological seals protect ports as well as connectors from moisture and dust
- Adjustable Kickstand that is Convertible to a handle
- Magnesium Alloy Housing with All-Around Elastomeric Rubber
- MIL-STD-38999 connector for LAN/USB2.0, RS232/RS422 and DC Power Input

# R08IWK8M-RTU1ML, 8.4-inch Ultra Rugged Tablet

Military-Grade Tablet Ready for Challenging Tasks and Tough Environments

## Display Specification

Resolution	800 x 600
Contrast Ratio	600:1
Panel Brightness	600 nit
Viewing Angle	75/75/60/70
Touch	Resistive Touch

## System Specification

Processor	Intel® Core™ i5-8265U Whiskey Lake, 1.6 GHz (Turbo up to 3.90 GHz)
System Memory	4GB SODIMM DDR4-2400 (up to 16GB) <sup>1</sup>
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

## Interface

USB	2 x USB 3.0
Memory Card Slot	1 x Micro SD Card Slot
SIM card slot	1 x Micro SIM Card Slot
MIL-STD-38999 connector	1 x DC input 1 x LAN/USB2.0 1 x RS232/RS422

## Audio

Speaker	2 x 1 Watt Speaker
---------	--------------------

## Wireless Communications

WWAN	Optional 4G/ LTE or 3G
WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth
GPS	u-Blox Neo-M8N, supports GPS (Optional GLONASS, Galileo, BeiDou)

## Keyboard and Input

Physical Buttons	1 x Power, 1 x Menu, 3 x Function Key, 2 x Brightness Control Key
LED Indicators	Power, Battery, HDD, RF
Touch	Resistive Touch

## Mechanical and Environment

Dimensions	266 x 222 x 50 mm
Weight	2.39 kg
Housing	Aluminum Magnesium Alloy Housing with Protective Rubber
Operating Temperature	-20°C to 60°C (AC Mode), -10°C to 50°C (Battery Mode)
Storage Temperature	-30°C to 70°C
Operating Humidity	10 to 90% RH, non-condensing
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, 4ft to concrete
IP Rating	Default IP54

## Power Management

Power Input	9-36V DC in
Battery	11.1V, 5200mAh Lithium-Ion Battery (6cells)
Battery Operating Time	8 hours <sup>1</sup>
Power Consumption	15W

## Security Function

Security	Trusted platform module (TPM) V2.0
----------	------------------------------------

## Standards and Certification

EMC	FCC
Safety	CE

## Accessories

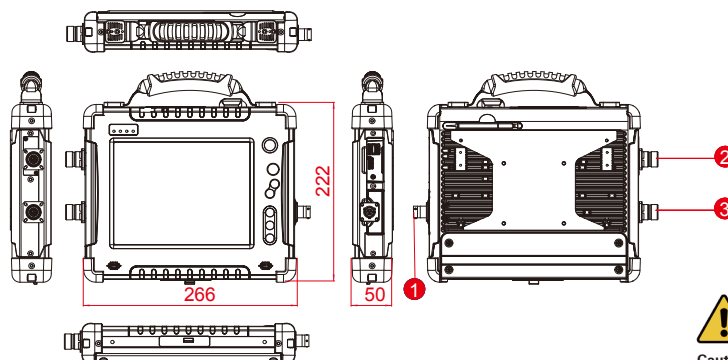
### Standard Accessories

Adapter and Power Cord  
Standard Battery  
Quick Start Guide  
Manual & Driver CD  
Touch Stylus  
MIL-STD-38999 cable for External connecting

### Optional Accessories

Adjustable Kickstand  
Multi-functional Desktop Docking station  
Vehicle Mounting Charger Kit  
Car Power Charger  
Hand Strap  
Shoulder Strap  
Soft Shell Case  
Carry Bag

## Drawing <sup>2</sup>



- ① DC 9-36V Input
- ② LAN/USB 2.0
- ③ RS232/422

\*MIL-STD-38999 connector for LAN/USB2.0, RS232/RS422 and DC Power Input.



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

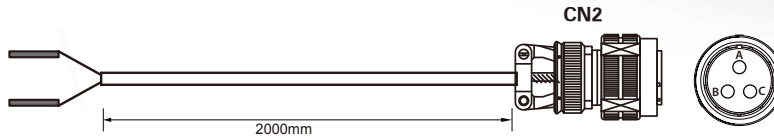
- 1. Measured at dimming LCD brightness. Varies depending on the usage conditions, or when an external device is attached.
- 2. This is a simplified drawing and some components are not marked in detail.

# R08IWK8M-RTU1ML, 8.4-inch Ultra Rugged Tablet

Military-Grade Tablet Ready for Challenging Tasks and Tough Environments

## Pin Definition

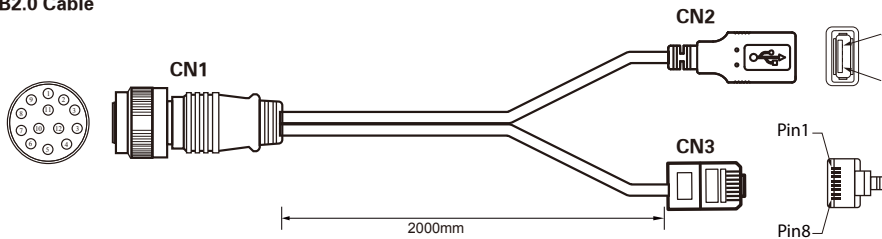
### Power Cable



Pin No	Symbols	Color
OPEN	VCC	White
OPEN	GND	Black

Pin No	Symbols	Color
CN2-A	VCC	White
CN2-B	GND	Black

### LAN/USB2.0 Cable

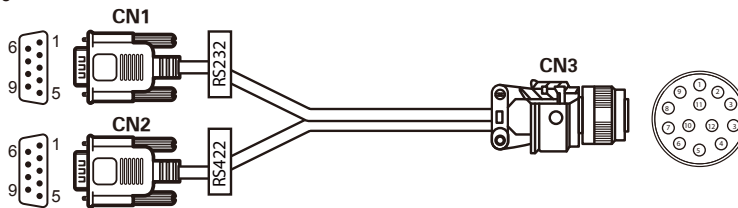


Pin No	Symbols	Color
CN1-1	USB_5V	Red
CN1-2	USB_GND	Black
CN1-3	USB_D-	White
CN1-4	USB_D+	Green
CN1-5	DA+	Orange/White
CN1-6	DA-	Orange
CN1-7	DB+	Green/White
CN1-8	DC+	Blue
CN1-9	DC-	Blue/White
CN1-10	DB-	Green
CN1-11	DD+	Brown/White
CN1-12	DD-	Brown
CN1-13	NC	

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

### RS232/RS422 Cable



Pin No	Symbols	Color
CN1-9	RS232_RI	No assignment
CN1-1	RS232_DCD	No assignment
CN1-2	RS232_RXD	No assignment
CN1-3	RS232_TXD	No assignment
CN1-5	GND	No assignment
CN1-4	RS232_DTR	No assignment
CN1-6	RS232_DSR	No assignment
CN1-7	RS232_RTS	No assignment
CN1-8	RS232_CTS	No assignment
CN2-1	RS422_TX2-	No assignment
CN2-2	RS422_TX2+	No assignment
CN2-3	RS422_RX2+	No assignment
CN2-4	RS422_RX2-	No assignment
CN2-5	GND	No assignment

Pin No	Symbols	Color
CN3-1	RS232_RI	No assignment
CN3-2	RS232_DCD	No assignment
CN3-3	RS232_RXD	No assignment
CN3-4	RS232_TXD	No assignment
CN3-5	GND	No assignment
CN3-6	RS232_DTR	No assignment
CN3-7	RS232_DSR	No assignment
CN3-8	RS232_RTS	No assignment
CN3-9	RS232_CTS	No assignment
CN3-10	RS422_TX2-	No assignment
CN3-11	RS422_TX2+	No assignment
CN3-12	RS422_RX2+	No assignment
CN3-13	RS422_RX2-	No assignment
CN3-5	GND	No assignment



## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660