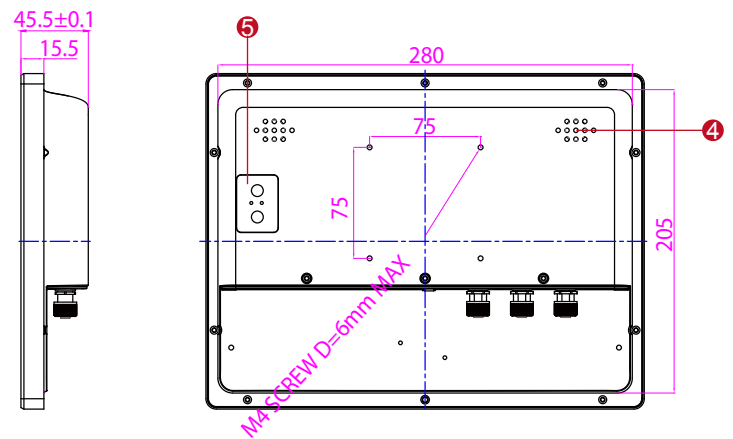
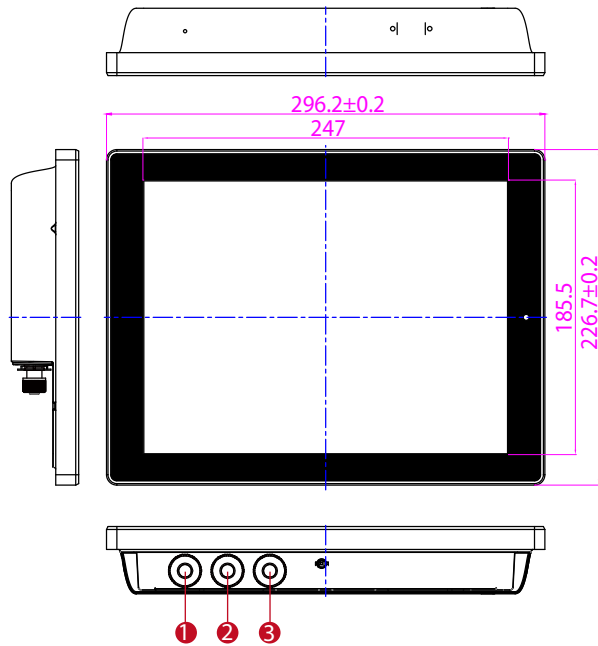


# 12.1" Military S65 Panel PC - R12IB3S-MSM2(HB)

## Features

- 12.1" 1024 x 768 Resolution with Projected Capacitive Multi-Touch (P-CAP)
- Intel® Celeron® Bay Trail-M N2930 1.83 GHz
- Fanless cooling system and ultra-low power consumption
- Edge-to-edge design
- M12 waterproof connectors
- Full IP65
- 1 x LAN, 1 x RS232, 1 x USB2.0



1. 9~36V DC (M12 type)
2. LAN, USB (M12 type)
3. RS232 (M12 type)
4. 1 Watt Speaker
5. OSD Panel

## Specifications

### System

- Processor : Intel Celeron Bay Trail-M N2930 1.83GHz
- System Chipset : Intel ATOM SoC Integrated
- System Memory : 2GB DDR3L 1600 SODIMM (max. 8GB)
- Storage : 64GB mSATA SSD
- LAN : Intel WG82574L GbE LAN

### Input / Output

- COM Port : 1 x RS 232 (M12 type)(Optional 422/485)
- USB Port : 1 x USB 2.0 (M12 type)
- Ethernet : 1 x 10/100/1000 LAN (M12 type)
- Speaker : 1 x 1 Watt Speaker

### Operating System

- Operation System : Windows 10 IoT Enterprise  
Windows Embedded 8.1 Industry Pro  
Windows Embedded Standard 7

### Security Support

- Trusted Platform Module (TPM 1.2)

### Power Considerations

- Power Input : 9-36V DC (M12 type)
- Power Consumption : 24W

### Display

- Size : 12.1" TFT
- Resolution : 1024 x 768
- Brightness : 500nits Optional for High Brightness 1000nits
- Contrast Ratio : 700:1
- Viewing angle : -80~80(H) ; -70~70(V)
- Max color : 16.2M
- Touch : Projective-Capacitive Touch with optional protection glass

### Software Support

- Watchdog SDK

### Mechanical Specifications

- Cooling System : Fanless design
- Mounting : VESA Mount (75x75mm), Panel Mount
- Dimensions(W x H xD) : 296.2 x 226.7 x 45.5 (mm)

### Environment Considerations

- Operating Temperature : -10 deg. C to 55 deg. C
- Operating Humidity : 10% to 95% (non-condensing)
- IP Rating : Full IP65
- Shock Operating : 30g for 18ms, 300m/s<sup>2</sup>
- Vibration Operating : 1.60/1.96/2.18 g rms for XYZ/ 5-500Hz

### Certifications & Standards

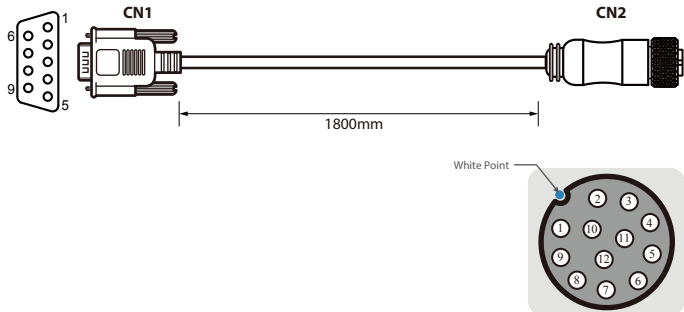
- Compliant with MIL-STD-810F/G for vibration / shock, MIL-STD 461E/F (RE101/RE102),(CE101/CE102), CE, FCC



# 12.1" Military S65 Panel PC - R12IB3S-MSM2(HB)

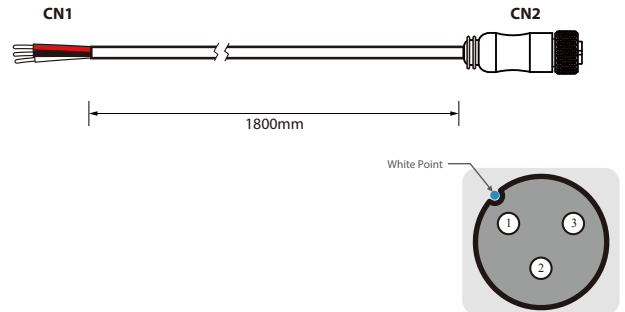
## Pin Assignment of cables

### RS-232 to M12 Cable



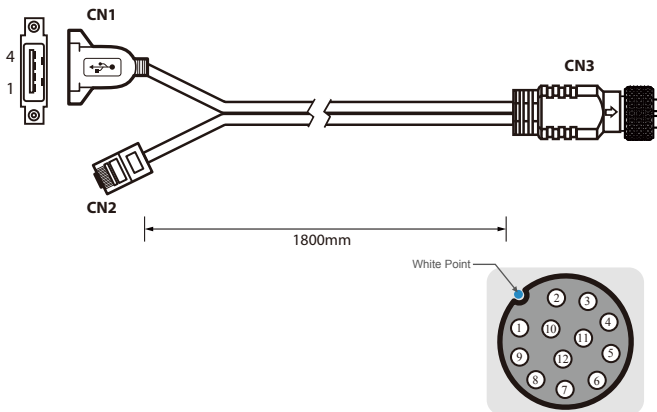
Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	DCD	Green	↔	CN2-1	DCD	Green
CN1-6	DSR	Brown	↔	CN2-2	DSR	Brown
CN1-2	RXD	Red	↔	CN2-3	RXD	Red
CN1-7	RTS	Orange	↔	CN2-4	RTS	Orange
CN1-3	TXD	Blue	↔	CN2-5	TXD	Blue
CN1-8	CTS	White	↔	CN2-6	CTS	White
CN1-4	DTR	Purple	↔	CN2-7	DTR	Purple
CN1-9	RI	Yellow	↔	CN2-8	RI	Yellow
CN1-5	GND	Black	↔	CN2-9	GND	Black

### DC Power to M12 Cable



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	VCC+	Red	↔	CN2-1	VCC+	Red
CN1-2	GND	Black	↔	CN2-2	GND	Black
CN1-3	VCC-	White	↔	CN2-3	VCC-	White

### USB 2.0 & GIGA LAN to M12 Cable



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN3-1	VCC	RED	↔	CN1-1	VCC	RED
CN3-2	D-	WHITE	↔	CN1-2	D-	WHITE
CN3-3	D+	GREEN	↔	CN1-3	D+	GREEN
CN3-4	GND	BLACK	↔	CN1-4	GND	BLACK
CN3-5	White/Orange		↔	CN2-1	White/Orange	
CN3-6	Orange		↔	CN2-2	Orange	
CN3-7	White/Green		↔	CN2-3	White/Green	
CN3-8	Blue		↔	CN2-4	Blue	
CN3-9	White/Blue		↔	CN2-5	White/Blue	
CN3-10	Green		↔	CN2-6	Green	
CN3-11	White/Brown		↔	CN2-7	White/Brown	
CN3-12	Brown		↔	CN2-8	Brown	

### Environmental (MIL-STD 810G Compliance)

Vibration	MIL-STD-810F/G Method 514.5
Humidity	MIL-STD-810F/G Method 507.4
Transit Drop	MIL-STD-810F/G Method 516.5
High Temperature	Storage: MIL-STD-810F/G Method 501.4 Operation: MIL-STD-810F/G Method 501.4
Low Temperature	Storage: MIL-STD-810F/G Method 502.4 Operation: MIL-STD-810F/G Method 502.4

### Environmental (MIL-STD 461E/F Compliance)

RE	RE 101 / RE 102
CE	CE 101 / CE 102
Optional with EMI Glass / Touch	
CS	RS 101 / RS 103
CS	CS 101 / CS 106 / CS 115 / CS 116 CS 109 / CS 114

\* If you require external test report, Winmate will charge NRE fee.



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