

# RUGGED PANEL PC

12.1" TFT Wide Rugged LCD Panel PC 1024x768 with Intel Celeron Bay Trail-M N2930 1.83 GHz and Projected Capacitive Multi-Touch (P-CAP)

MODEL: WRD1210-J-PCAP



## FEATURES:

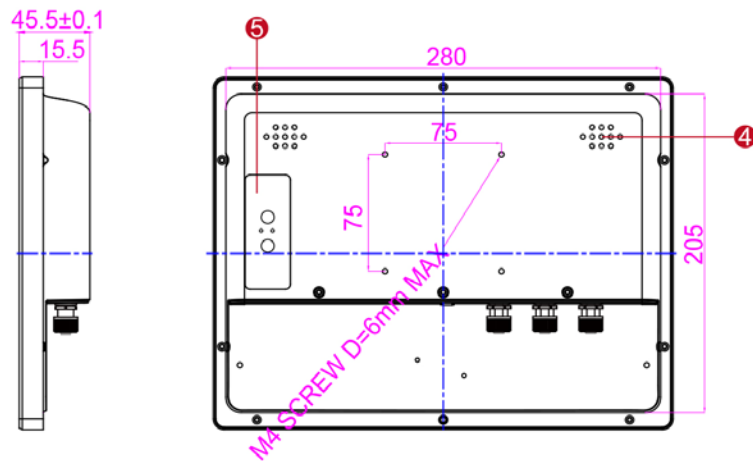
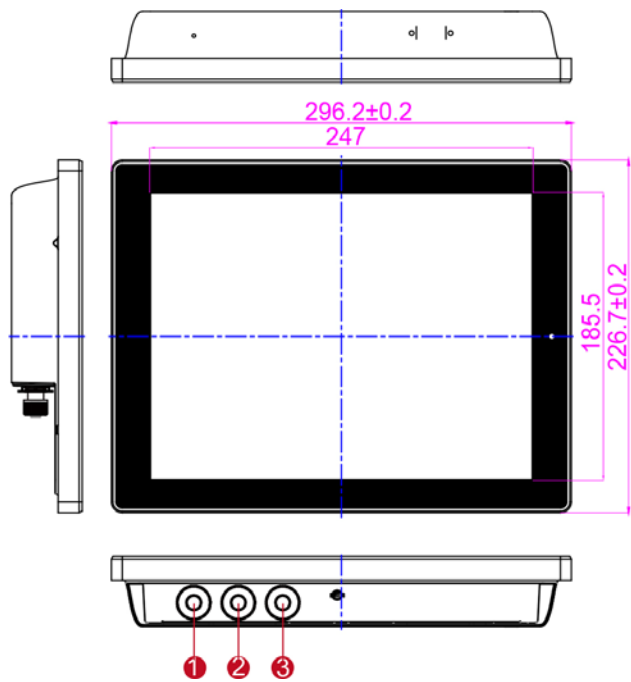
- 12.1" 1024 x 768 with Projected Capacitive Multi-Touch (P-CAP)
- Intel Celeron Bay Trail-M N2930 1.83 GHz
- Fanless cooling system and Ultra-low power consumption
- Edge-to-edge design
- Full IP65 design with Special M12 Waterproof connectors
- 1 x LAN, 1 x RS232, 1 x USB 2.0

## SPECIFICATIONS:

SYSTEM	
Processor	Intel Celeron Bay Trail-M N2930 1.83GHz
System Chipset	Intel ATOM SoC Integrated
Memory	2GB DDR3L 1600 SODIMM (max. 8GB)
Storage	64GB mSATA SSD
INPUT/OUTPUT	
COM port	1x RS232 (M12 type)(Optional 422/485)
USB Ports	1 x USB 2.0 (M12 type)
Ethernet	1x 10/100/1000 LAN (M12 type)
Speaker	1 x 1 watt Speaker
OPERATING SYSTEM	
Operating System	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7
SOFTWARE SUPPORT	
Watchdog SDK	
MECHANICAL SPECIFICATION	
Cooling System	Fanless design
Mounting	VESA Mount (75x75mm), Panel Mount
Dimensions (W x H xD)	296.2 x 226.7 x 45.5 (mm)

DISPLAY	
Size/Type	12.1" TFT (Widescreen)
Resolution	1024x 768
Brightness	500nits Optional for High Brightness 1000nits
Contrast Ratio	700:1 (typ.)
Viewing Angle	-80~80(H) ; -70~70(V)
Max Colors	16.2M
Active Display Area	247 (H) x 185.5 (V)
Touch	Projected-Capacitive Touch with optional protection glass
POWER CONSIDERATION	
Power Input	9-36V DC (M12 type)
Power Consumption	24W
ENVIRONMENT CONSIDERATIONS	
Operating Temperature	-15 deg. C to 55 deg. C
Operating Humidity	10% to 95% (non-condensing)
IP Rating	Full IP65
Shock Operating	40g for 11ms
Vibration Operating	1.48/1.98/2.24 g rms for XYZ/ 5-500Hz
SECURITY SUPPORT	
Trusted Platform Module (TPM 1.2)	
CERTIFICATIONS & STANDARDS	
Compliant with MIL-STD-810F/G for vibration / shock, CE, FCC	

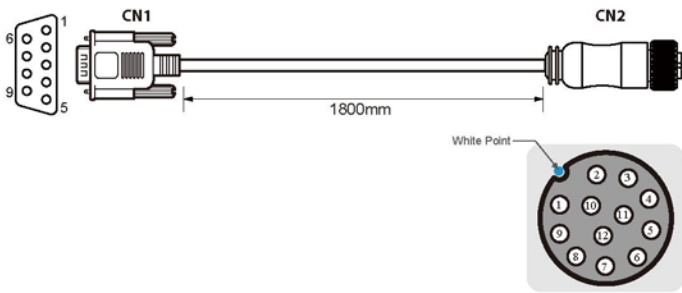
# MECHANICAL DRAWING:



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

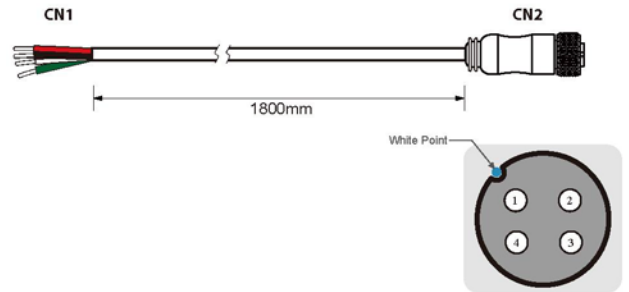
# PIN ASSIGNMENT OF CABLES

## RS-232 to M12 Cable



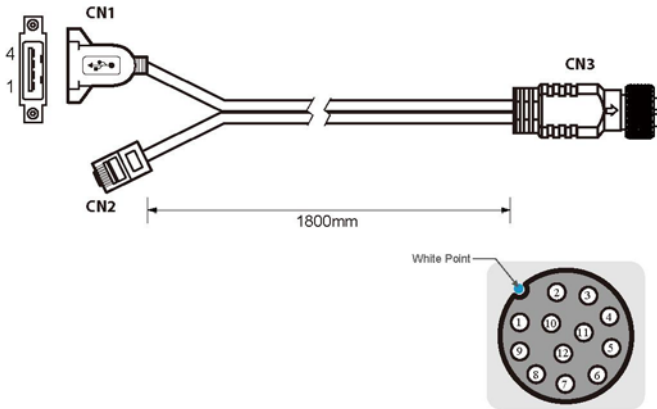
Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	DCD	Green	↔	CN2-1	DCD	Green
CN1-6	DSR	Brown	↔	CN2-2	DSR	Brown
CN1-2	RXD	Red	↔	CN2-3	RXD	Red
CN1-7	RTS	Orange	↔	CN2-4	RTS	Orange
CN1-3	TXD	Blue	↔	CN2-5	TXD	Blue
CN1-8	CTS	White	↔	CN2-6	CTS	White
CN1-4	DTR	Purple	↔	CN2-7	DTR	Purple
CN1-9	RI	Yellow	↔	CN2-8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

## 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	

Twisted pairs