

# 19" Fanless Full IP65/ NEMA4 Panel PC (Intel® Celeron Bay Trail-M N2930 1.83GHz)

MODEL #: R19IB3S-65M1

Mechanical Design



Standard:  
brushed stainless



Optional:  
black, high polish,  
varnished coating

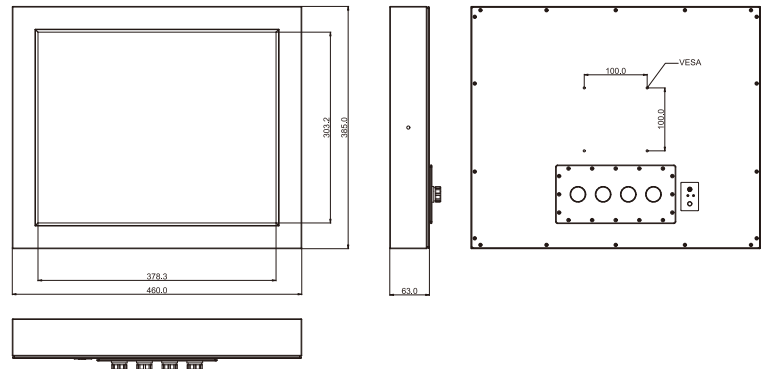
## Features:

- Intel® Celeron Bay Trail-M N2930 1.83GHz Processor
- Fanless Design
- Full IP65 dust/water resistant
- SUS 316/ AISI 316 stainless steel for food and chemical industries
- Optical Bonding with Anti-moisture Treatment (Optional)
- 5 Wire Resistive Touch/ Anti-Reflection Protection Glass (Optional)

## IP65 connector / cable



2 x USB LAN COM2 Power



\* Note: this is a simplified drawing and some components are not marked in detail. Please contact our sales representative if you need further product information.

## System Specifications

### TFT Characteristics

- Resolutions : 1280 x 1024
- Brightness : 250 cd/m<sup>2</sup> (typ.)
- Contrast Ratio : 1000 : 1 (typ.)
- Viewing Angles : -85~85(H); -80~80(V)
- Max Colors : 16.7M

### SBC Specifications :

- Processor : Intel® Celeron Bay Trail-M N2930 1.83GHz
- BIOS : AMI 16Mbit Flash
- System Chipset : Intel® Atom SoC Integrate
- Memory Slot : 1 x SO-DIMM, Default 4GB, Max 8GB DDR3L 1600
- Storage : Default 64GB
- Graphic Chipset : Integrated HD Graphics
- Ethernet : 2 x RJ45 Gigabit LAN (1 x RJ45 internal)
- Audio : Realtek HD Audio Codec
- USB : 6 x USB2.0 (4 x USB internal)
- Serial : 4 x RS232 (3 x RS232 internal)
- Expansion Slot : 1 x Mini PCIe (Internal)
- SSD Interface : 1 x Mini PCIe SSD
- Power Input : DC-IN (Lockable, Power Jack)
- Certification : CE, FCC, RoHS
- Security : Trusted Platform Module (TPM 1.2)

\* A customized housing is needed if you would like to have more I/O connectors.

### Power Specifications :

- Power Input : 12V DC IN (Lockable Power Jack)
- Power Consumption : 45W (typ.)(Max.backlight & high CPU load)

### Mechanical Specifications:

- Housing : SUS 316/ AISI 316 stainless steel

### Accessories :

- External Power Supply 80W w/power cord

### Environment Considerations :

- Operating Temperature : 0 deg.C to 45deg.C
- Operating Humidity : 30% to 90% (non condensing)

### Input/ Output Connectors :

- Ethernet LAN : 1 X RJ45-10/100/1000 Mbps
- COM : 1 X RS232
- USB : 2 x USB
- Power : 1 X 12VDC

### Order Options :

SBC	PANEL PC
RAM : SODIMM DDR3L Max. 8GB	Mechanical : Stainless Chassis
Storage : 2.5" HDD/ Mini Pcle SSD	Touch : 5 Wires Resistive or AR Glass
	OS : Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard



Note: All Specifications are subject to change without prior notice!

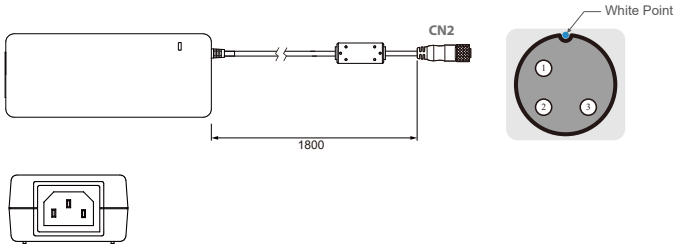
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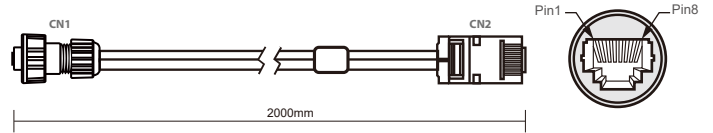
## Pin Assignment of cables

### Power Cable



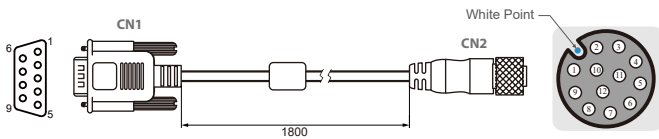
Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	VIN -	NO ASSIGN	↔	CN2-1	VCC+	Flow Adapter
CN1-2	VIN -	NO ASSIGN	↔	CN2-2	GND	Flow Adapter
CN1-3	VIN -	NO ASSIGN	↔	CN2-3	VCC -	Flow Adapter

### LAN Cable



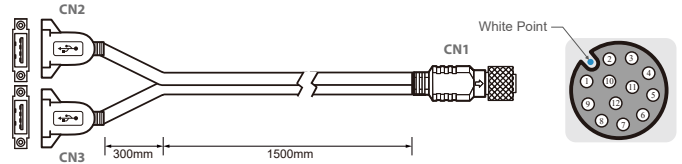
Plug	Wire Color	Conn.	
1	Orange / White	1	Twist
2	Orange	2	
3	Green / White	3	Twist
4	Blue	4	
5	Blue / White	5	Twist
6	Green	6	
7	Brown / White	7	Twist
8	Brown	8	

### RS232 Cable



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	DCD-CON2	Green	↔	CN2-1	DCD-CON2	Green
CN1-6	DSR-CON2	Brown	↔	CN2-2	DSR-CON2	Brown
CN1-2	RXD-CON2	Red	↔	CN2-3	RXD-CON2	Red
CN1-7	RTS-CON2	Orange	↔	CN2-4	RTS-CON2	Orange
CN1-3	TXD-CON2	Blue	↔	CN2-5	TXD-CON2	Blue
CN1-8	CTS-CON2	White	↔	CN2-6	CTS-CON2	White
CN1-4	DTR-CON2	Purple	↔	CN2-7	DTR-CON2	Purple
CN1-9	RI-CON2	Yellow	↔	CN2-8	RI-CON2	Yellow
CN1-5	GND-CON2	Black	↔	CN2-9	GND-CON2	Black

### USB Cable



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-2	VCC	RED	↔	CN2-1	VCC	RED
CN1-3	D-	WHITE	↔	CN2-2	D-	WHITE
CN1-4	D+	GREEN	↔	CN2-3	D+	GREEN
CN1-5	GND	BLACK	↔	CN2-4	GND	BLACK
CN1-6	VCC	RED	↔	CN3-1	VCC	RED
CN1-7	D-	WHITE	↔	CN3-2	D-	WHITE
CN1-8	D+	GREEN	↔	CN3-3	D+	GREEN
CN1-9	GND	BLACK	↔	CN3-4	GND	BLACK
CN1-1	GND	Braid	↔	Braid connect to the housing		