

# 21.5" Fanless Full IP65/NEMA4 Panel PC (Intel® 7<sup>th</sup> Generation Core™ i5 Platform)

MODEL #: W22IK3S-65A3

## Mechanical Design



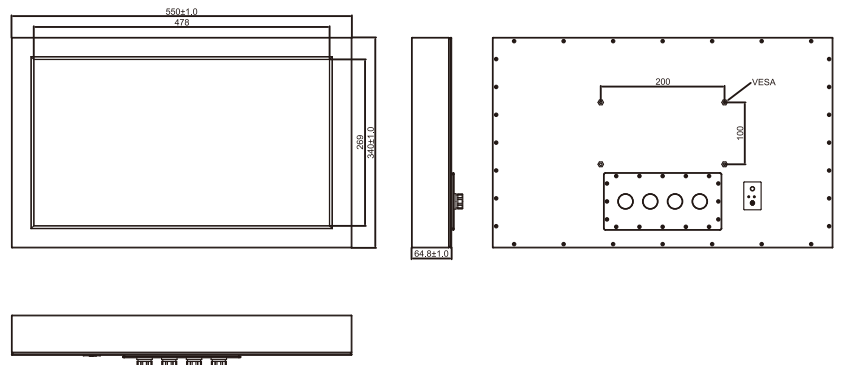
### Features:

- 7<sup>th</sup> Generation (kaby Lake) Intel® Core™ i5-7200U 2.5GHz (turbo to 3.1GHz)
- Fanless Design
- Full IP65 dust/water resistant
- Stainless Housing with Anti-Corrosion Treatment
- 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

- Resolution : 1920 x 1080
- Brightness : 250 cd/m<sup>2</sup> (typ.)
- Contrast Ratio : 1000 : 1 (typ.)
- Viewing Angles : -89~89(H); -89~89(V)
- Max Colors : 16.7M
- Touchscreen : 5 Wire Resistive Touch (Optional)

### SBC Specifications :

- Processor : Intel® Core i5-7200U 2.5GHz (turbo to 3.1GHz)
- BIOS : Insyde BIOS
- System Chipset : Intel® SoC Integrated
- System Memory : 4GB DDR4-2133 SO-DIMM (Max 16GB)
- Graphic Chipset : Intel® HD Graphics 620
- LAN : Intel® Gigabit-LAN Controller I211AT + PHY I219LM
- Storage : 64GB M.2 B Key SATA III SSD (Options up to 256GB)
- USB : 2 x USB 2.0
- Serial : 1 x RS232
- Power Input : DC-IN
- Audio : Realtek ALC283 HD Audio Codec

\* 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 : 66W (typ.)(Max.backlight & high CPU load)

### Accessories :

- External Power Supply 80W w/power cord

### Environment Considerations :

- Operating Temperature : 0 deg.C to 45 deg.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 2.0
- Power : 1 x 12VDC

### Mechanical Specifications

- Housing : SUS 316/ AISI 316 stainless steel

### Order Options :

SBC	PANEL PC
RAM : SODIMM DDR4 (up to 16GB)	Mechanical : Stainless Chassis
Storage : M.2 B Key SATA III (up to 256GB)	Touch : 5 Wires Resistive(Optional)
	OS : Windows 10 IoT Enterprise

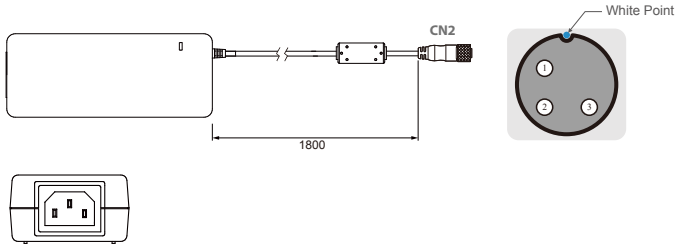


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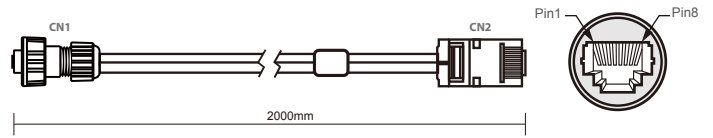
## Pin Assignment of cables

### Power Cable



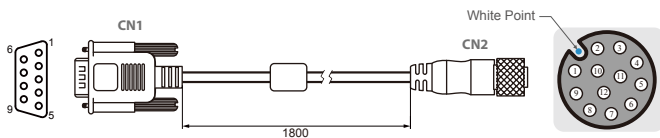
Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	VIN -	NO ASSIGN	↔	CN2-1	VCC+	Flow Adapter
CN1-2	VIN -	NO ASSIGN	↔	CN2-2	GND	Flow Adapter
CN1-3	VIN -	NO ASSIGN	↔	CN2-3	VCC -	Flow Adapter

### LAN Cable



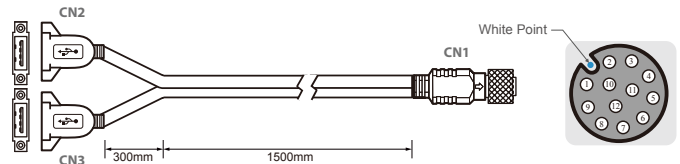
Plug	Wire Color	Conn.	
1	Orange / White	1	Twist
2	Orange	2	
3	Green / White	3	Twist
4	Blue	4	
5	Blue / White	5	Twist
6	Green	6	
7	Brown / White	7	Twist
8	Brown	8	

### 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		