

Warning

- Only qualified service personnel should install and service this product to avoid injury.
- Observe all ESD procedures during installation to avoid damaging the equipment.

1 Preparing tools

Unpack the equipment and make sure the following tools are available and delivered contents are correct before you begin the installation procedure.

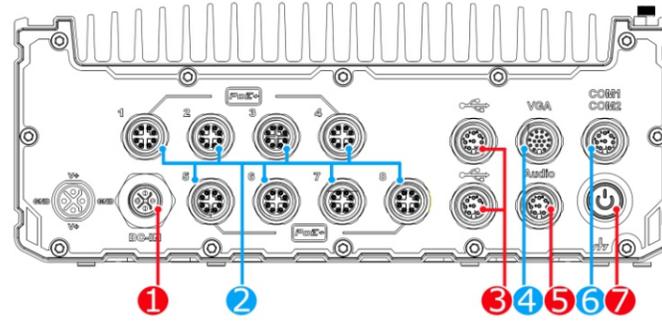
- 1-1. User-provided tools
- Anti-static wrist wrap

1-2. Packing List

Item	Description	Quantity
01	SEMIL 1700 series system	1
02	Drivers & utilities disc	1

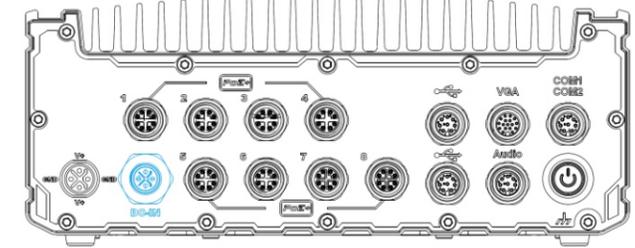
(Optional)

2 Overview



No.	Item	Description	
1	DC input	8V to 48V DC input (M12 S-coded)	
2	PoE+ GbE ports	The M12 X-coded Power over Ethernet (PoE) ports provide both data connection and electric power to devices (eg. IP camera).	
		SEMIL -1704	1x IEEE 802.3at GbE+ port via Intel® I219
		SEMIL -1714J	3x IEEE 802.3at GbE+ port via Intel® I210
		SEMIL -1708	1x IEEE 802.3at GbE+ port via Intel® I219
SEMIL -1718J	7x IEEE 802.3at GbE+ port via Intel® I210		
3	USB 2.0 port	The USB 2.0 ports are backward-compatible with USB 1.1 / 1.0.	
		SEMIL -1704	2x USB2.0 (M12 A-coded)
		SEMIL -1714J	2x USB2.0 (M12 A-coded)
		SEMIL -1708	4 x USB2.0 (M12 A-coded)
SEMIL -1718J	4 x USB2.0 (M12 A-coded)		
4	VGA port	VGA output supports resolution up to 1920x1200@60Hz	
5	Audio port	SEMIL-1704/ 1714J: Not applicable SEMIL-1714J/ 1718J: 1x mic-in and speaker-out (M12 A-coded)	
6	COM ports	COM 1 & 2 are RS-232 ports via an M12 A-coded connector	
7	Power button	Use this button to turn on or force shutdown the system.	

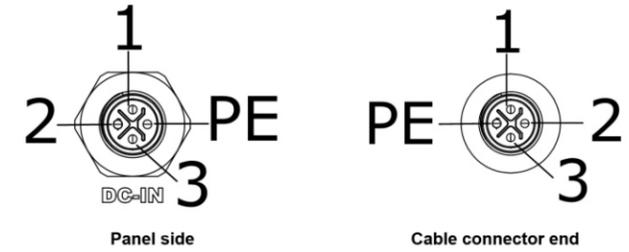
3 DC-IN



Warning

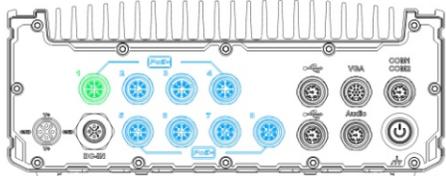
Please make sure the voltage of DC power is correct before you connect it to the system. Supplying a voltage over 48V will damage the system.

Connector Pin Definition



Signal	M12 panel side	M12 cable connector end	Wire color
V+	3	3	Blue
GND	2	2	White
V+	1	1	Orange
GND	PE	PE	Black

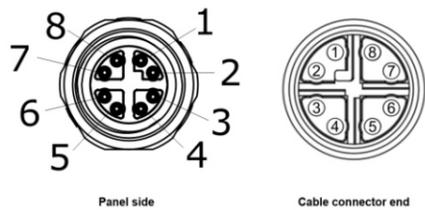
4 PoE+ Gigabit Ethernet Port



The number of ports for each SEMIL-1700 model variant is listed below:

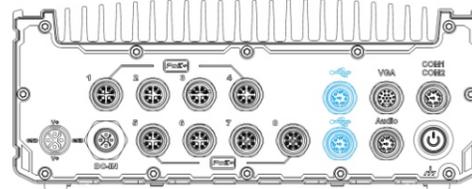
Model No.	PoE+ ports	Port description
SEMIL -1704	1x IEEE 802.3at GbE+ port via Intel® I219	
SEMIL -1714J	3x IEEE 802.3at GbE+ port via Intel® I210	
SEMIL -1708	1x IEEE 802.3at GbE+ port via Intel® I219	
SEMIL -1718J	7x IEEE 802.3at GbE+ port via Intel® I210	

Connector Pin Definition

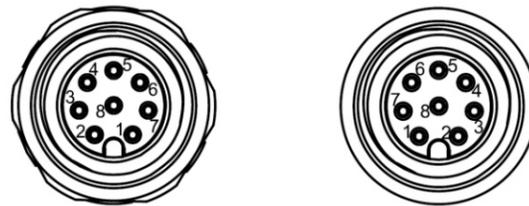


Signal	M12 panel side	M12 cable connector end	Wire color
LAN P0	1	1	Yellow
LAN N0	2	2	Yellow
LAN P1	3	3	Green
LAN N1	4	4	Green
LAN P3	5	5	Orange
LAN N3	6	6	Orange
LAN N2	7	7	Blue
LAN P2	8	8	Blue

5 USB Port

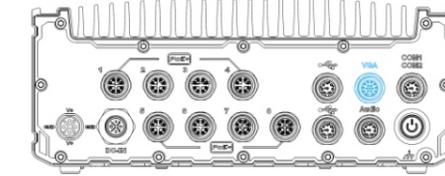


Connector Pin Definition

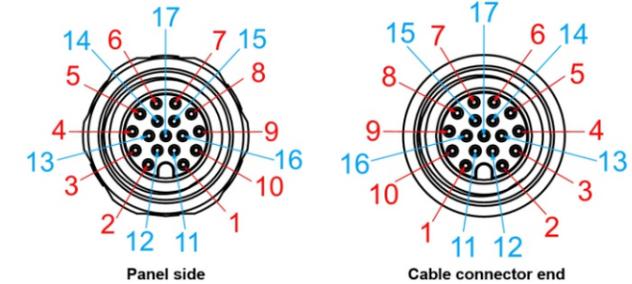


Signal	M12 panel side	M12 cable connector end	Wire color
D1+	1	1	Green
D1-	2	2	White
VCC_USB	3	3	Red
GND	4	4	Black
GND	5	5	Black
VCC_USB	6	6	Red
D2-	7	7	White
D2+	8	8	Green

6 VGA Port

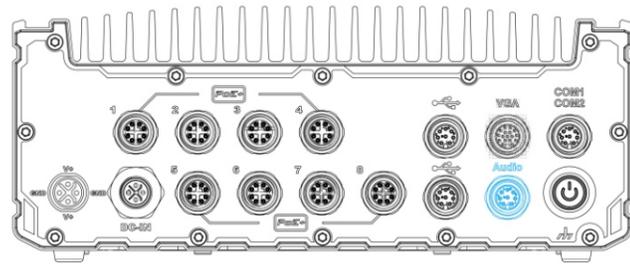


Connector Pin Definition

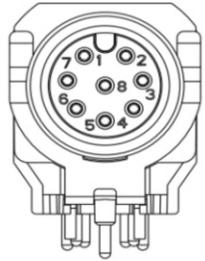


Signal	M12 panel side	M12 cable connector end	Wire color
Red	1	1	Orange
GREEN	9	9	Blue
BLUE	7	7	Blue
GND	6	6	Green
GND	8	8	Green
GND	10	10	Yellow
GND	12	12	Black
GND	13	13	Grey
GND	14	14	Grey
GND	11	11	Purple
GND	16	16	White
GND	15	15	White
PSV_VGA	17	17	Green
VGA_SDA	5	5	Orange
HSYNC_CN	3	3	Yellow
VSYNC_CN	2	2	Orange
VGA_SCL	4	4	Grey

7 Audio Port



Pin Definition



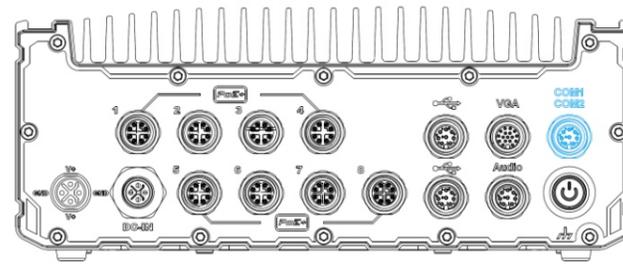
Socket end



Cable side

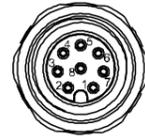
Signal	M12 Socket end	M12 cable side
Left channel	4	4
Right channel	5	5
Microphone	7	7
Ground	8	8

8 Port COM

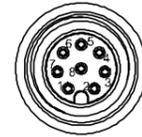


The system provides two COM ports via an M12 A-coded connector for communicating with external devices. These COM ports are 3-wire RS-232 specifications and provide up to 115200 bps baud rate.

Pin Definition



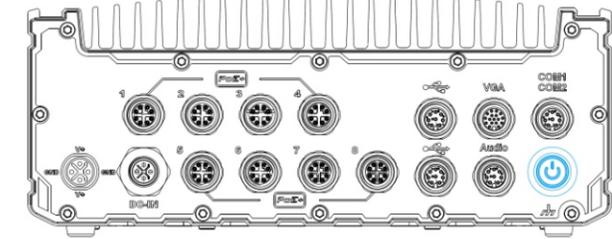
Panel side



Cable connector end

Signal	M12 panel side	M12 cable connector end	Wire color
TXD1	1	1	Black
RXD1	2	2	Orange
NC	3	3	x
PWR_IGN	4	4	Blue
GND	5	5	Grey
NC	6	6	x
RXD2	7	7	
TXD2	8	8	Light Orange

9 Power Button



The power button is a non-latched switch for ATX mode on/off operation. To turn on the system, press the power button and the PWR LED should light-up green. To turn off the system, issuing a shutdown command in OS is preferred, or you can simply press the power button. To force shutdown when the system freezes, press and hold the power button for 5 seconds. Please note that there is a 5-second interval between on/off operations (i.e. once the system is turned off, there is a 5-second wait before you can power-on the system).