



# NEOUSYS SEMIL-1700GC Series Waterproof GPU Computer Installation Guide

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## SEMIL-1700GC Series Quick Installation Guide



### 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.

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## Preparing tools

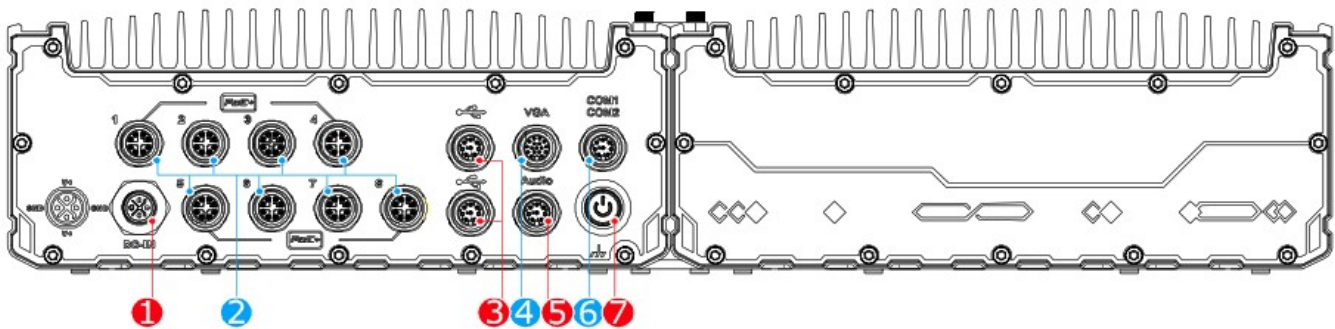
Unpack the equipment and make sure the following tools are available and delivered contents are correct before you begin the installation procedure.

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

2. Packing List

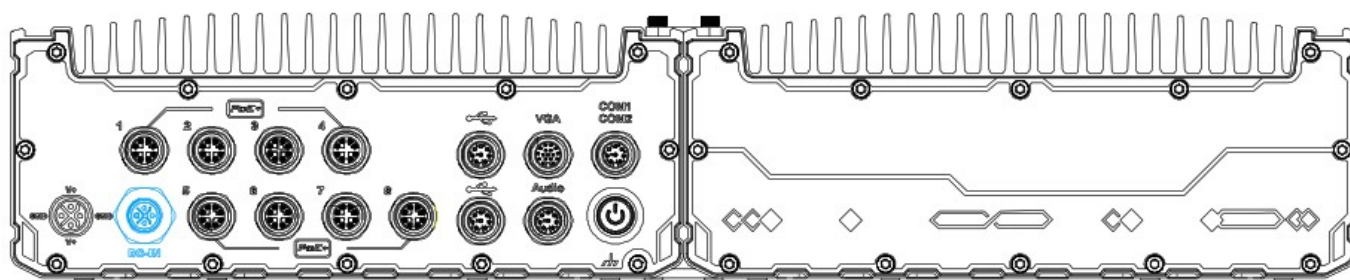
| Item | Description                | Quantity |
|------|----------------------------|----------|
| 1    | SEMIL 1700GC series system | 1        |
| 2    | Drivers & utilities disc   | 1        |

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 -1724GC                                                                                                               |
|     |                | SEMIL -1744GC                                                                                                               |
|     |                | SEMIL – 1728GC                                                                                                              |
| 3   | USB 2.0 port   | SEMIL- 1748GC                                                                                                               |
|     |                | 1x IEEE 802.3at GbE+ port via Intel®1219                                                                                    |
|     |                | 3x IEEE 802.3at GbE+ port via Intel®1210                                                                                    |
|     |                | 1x IEEE 802.3at GbE+ port via Intel®10219                                                                                   |
| 3   | USB 2.0 port   | 7x IEEE 802.3at GbE+ port via Intel®1210                                                                                    |
|     |                | SEMIL -1724GC                                                                                                               |
|     |                | SEMIL -1744GC                                                                                                               |
|     |                | SEMIL – 1728GC                                                                                                              |
| 3   | USB 2.0 port   | SEMIL- 1748GC                                                                                                               |
|     |                | 2x USB2.0 (M12 A-coded)                                                                                                     |
|     |                | 4 x USB2.0 (M12 A-coded)                                                                                                    |
|     |                |                                                                                                                             |
| 4   | VGA port       | VGA output supports resolution up to 1920×1200@60Hz                                                                         |
| 5   | Audio port     |                                                                                                                             |
| 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.                                                                    |

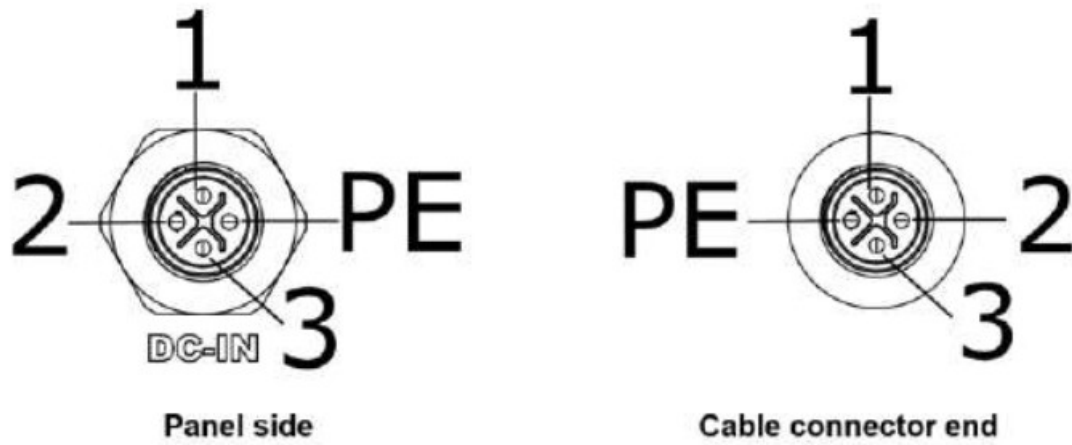
## DC-IN



## Warning

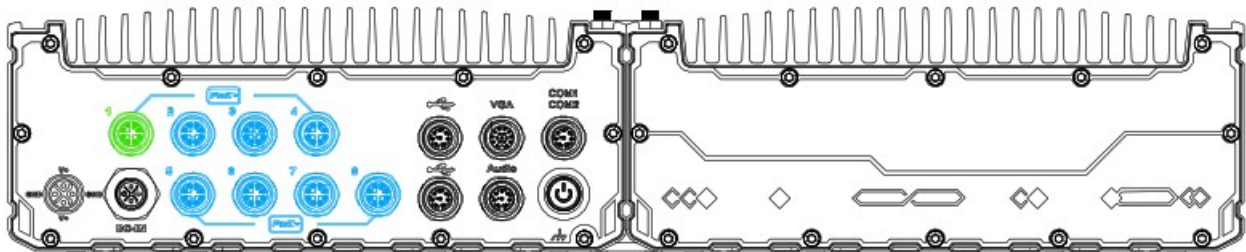
Please make sure the voltage of DC power is correct before you connect it to the system. Supplying a voltage over 48V will damage the system.

## Connector Pin Definition



| Signal | M12 panel side | M12 cable connector end | Wire color |
|--------|----------------|-------------------------|------------|
| V+     | 3              | 3                       |            |
| GND    | 2              | 2                       |            |
| V+     | 1              | 1                       |            |
| GND    | PE             | PE                      |            |

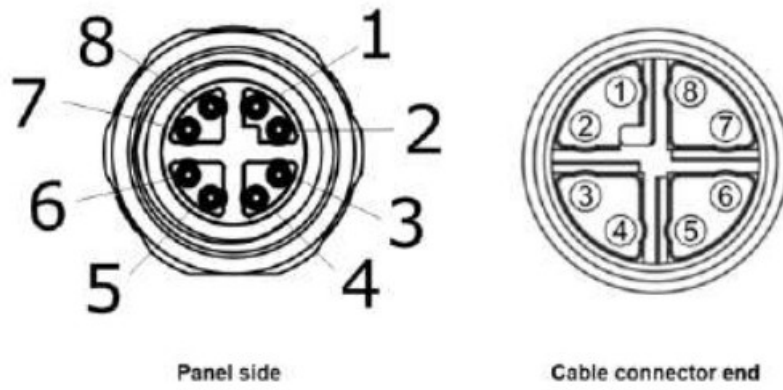
## PoE+ Gigabit Ethernet Port



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

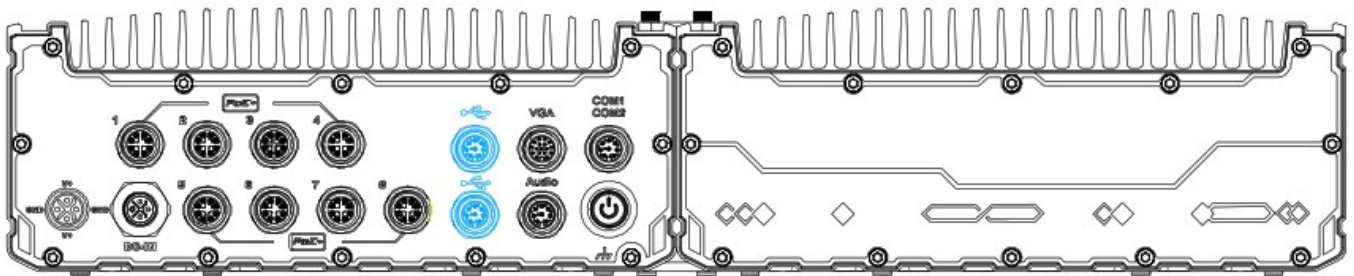
| PoE Ports      |                                                                                         |
|----------------|-----------------------------------------------------------------------------------------|
| Model No.      | Port description                                                                        |
| SEMIL -1724GC  | 1x IEEE 802.3at GbE+ port via Intele 1219<br>3x IEEE 802.3at GbE+ port via Intele 1210  |
| SEMIL -1744GC  |                                                                                         |
| SEMIL -1728GC  | 1x IEEE 802.3at GbE+ port via Intetil 1219<br>7x IEEE 802.3at GbE+ port via 111MP/91210 |
| SEMIL — 1748GC |                                                                                         |

### Connector Pin Definition

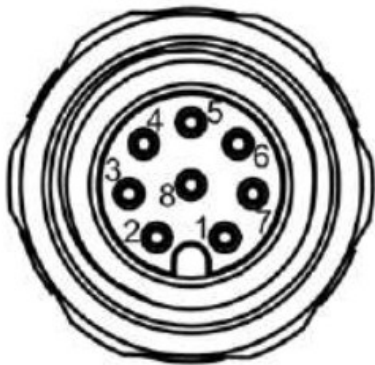


| Signal | M12 panel side | M12 cable connector end | Wire color |
|--------|----------------|-------------------------|------------|
| LAN PO | 1              | 1                       |            |
| LAN NO | 2              | 2                       |            |
| LAN P1 | 3              | 3                       |            |
| LAN N1 | 4              | 4                       |            |
| LAN P3 | 5              | 5                       |            |
| LAN N3 | 6              | 6                       |            |
| LAN N2 | 7              | 7                       |            |
| LAN P2 | 8              | 8                       |            |

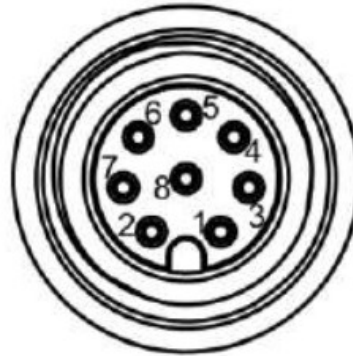
### USB Port



**Connector Pin Definition**



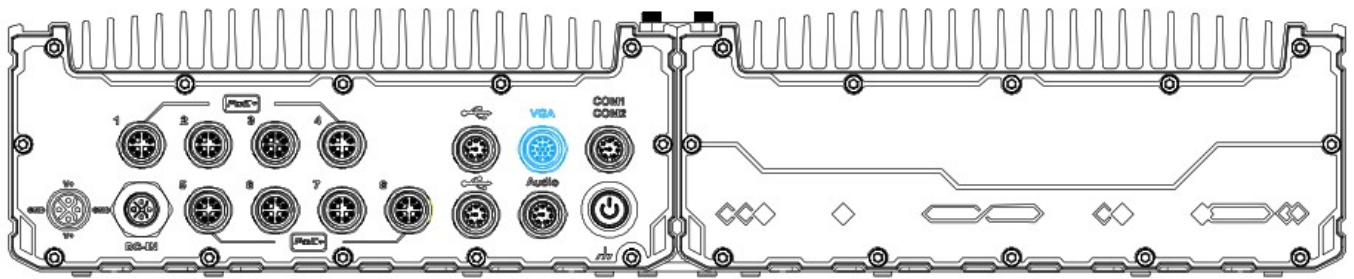
**Panel side**



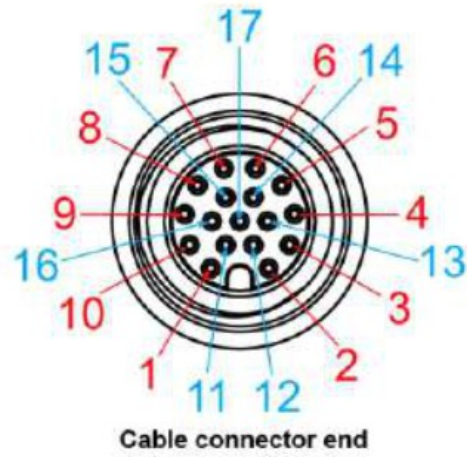
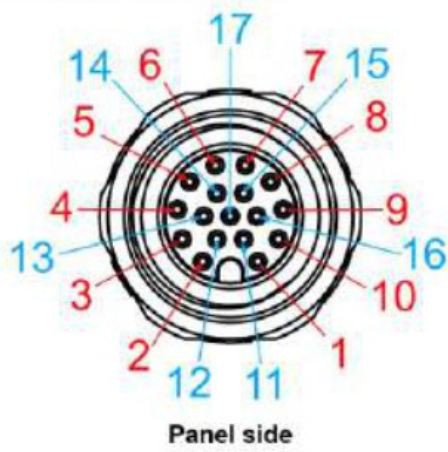
**Cable connector end**

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

## VGA Port

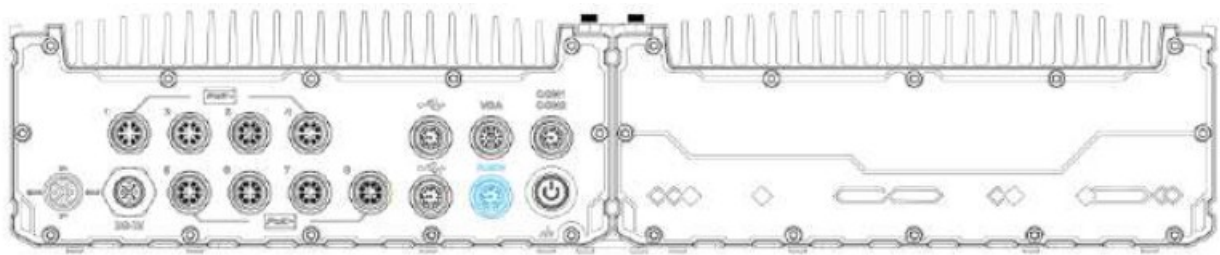


### Connector Pin Definition

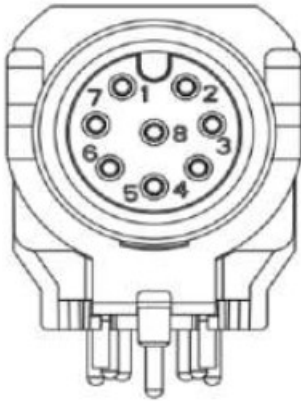


| Signal   | M12 panel side | M12 cable connector end | Wire color |
|----------|----------------|-------------------------|------------|
| Red      | 1              | 1                       |            |
| GREEN    | 9              | 9                       |            |
| BLUE     | 7              | 7                       |            |
| GND      | 6              | 6                       |            |
| GND      | 8              | 8                       |            |
| GND      | 10             | 10                      |            |
| GND      | 12             | 12                      |            |
| GND      | 13             | 13                      |            |
| GND      | 14             | 14                      |            |
| GND      | 11             | 11                      |            |
| GND      | 16             | 16                      |            |
| GND      | 15             | 15                      |            |
| P5V_VGA  | 17             | 17                      |            |
| VGA_SDA  | 5              | 5                       |            |
| HSYNC_CN | 3              | 3                       |            |
| VSYNC_CN | 2              | 2                       |            |
| GVA_SCL  | 4              | 4                       |            |

**Audio Port (SEMIL-1728GC/ 1748GC Only)**



### 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              |
| GND           | 8              | 8              |

### COM Port



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).

**Documents / Resources**

|                                                                                   |                                                                                                                                              |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
|  | <a href="#">NEOUSYS SEMIL-1700GC Series Waterproof GPU Computer</a> [pdf] Installation Guide<br>SEMIL-1700GC Series, Waterproof GPU Computer |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|