OMNI-3175-BT

AAEON® an ASUS assoc. co.
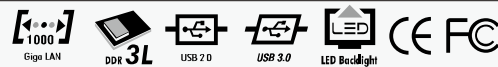
17" Modular HMI Panel PC with Intel® Celeron® J1900/ N2807 Processor
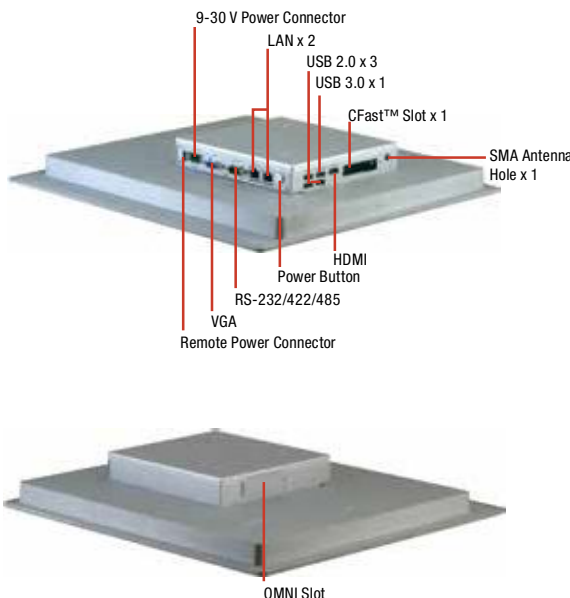
Features

- **17" WXGA (1280 x 1024) TFT LCD Display**
- **Intel® N2807/J1900 Processor**
- **P-CAP or Resistive Touch Support**
- **Aluminum Design**
- **IP65 Compliant Front Bezel**
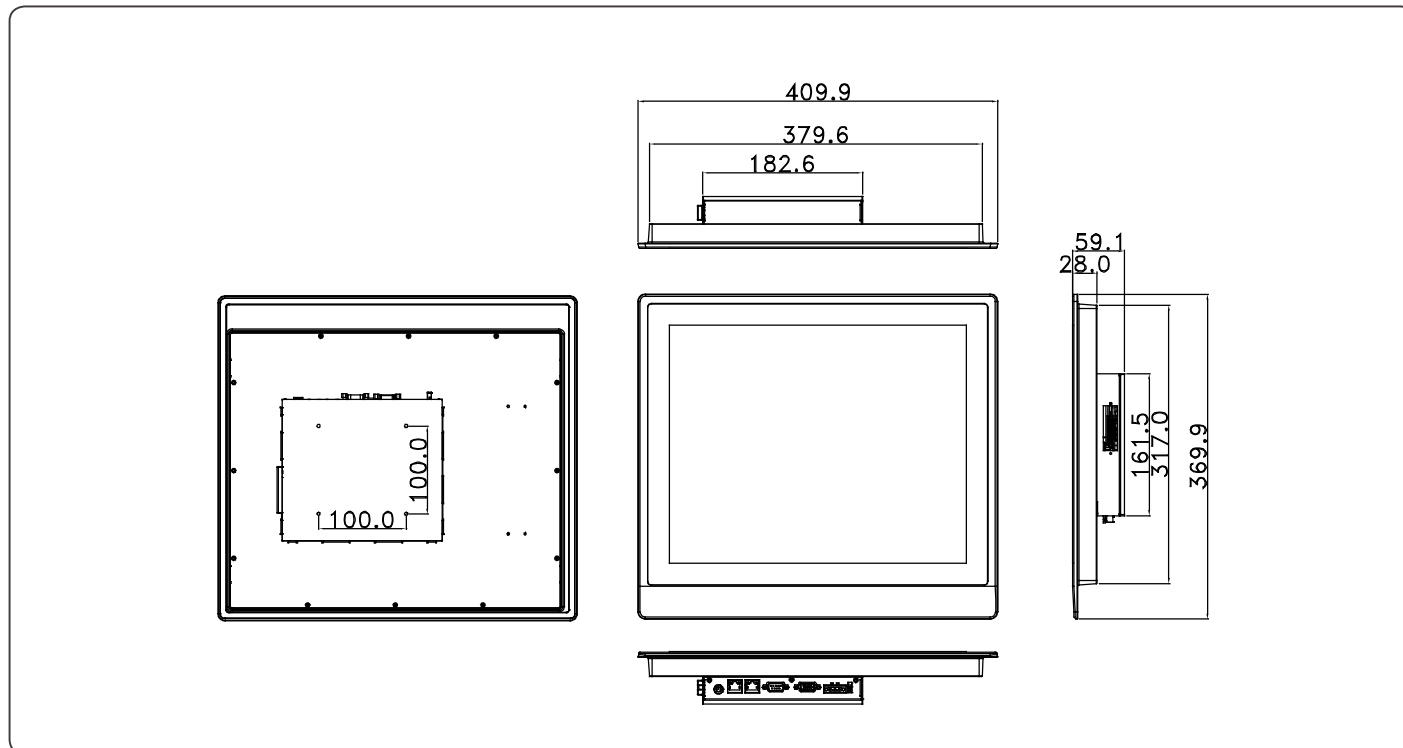- **Fanless Operation**
- **Easily Expandable I/O by AAEON OMNI I/O Modules**

1000 Giga LAN | DDR 3L | USB 2.0 | USB 3.0 | LED Backlight | CE | FC

Specifications

System	
Processor	Intel® N2807 processor, 1.58 GHz Intel® J1900 processor, 2 GHz
System Memory	204-pin DDR3L 1333MHz SODIMM x 1, up to 8 GB, (J1900) 204-pin DDR3L 1333MHz SODIMM x 1, up to 4 GB, (N2807)
LCD/CRT Controller	Integrated in processor
Ethernet	Intel® I211, 10/100/1000Base-TX x 2
I/O Port	USB 2.0 type A x 3 USB 3.0 type A x 1 SMA Antenna hole x 1 HDMI x 1 CFast x 1 DB-9 Type RS-232/422/485 x 1 RJ-45 x 2 for 10/100/1000 base-T DB-15 x 1 for VGA 3-pin terminal block x1 for 9~30 Vdc power input LED Power on/off switch x1 (Power on = Orange, Power off =N/A)
Storage Disk Drive	CFast™ x 1, 2.5" SATA HDD bay x 1
Expansion Slot	Mini card x 2 (Testing Compalibility Only) SIM card x 2 PCIE x 1 connector (AAEON PIN Define)
OS support	Windows® 7, Windows® 8, Windows® 10, Linux kernel 2.6.x or above
Mechanical	
Construction	Aluminum design (IP65 Front Frame)
Mounting	Wall /VESA Mount/Desktop (Optional panel mount kits)
Dimension (mm)	400 x 370 x 59 mm
Gross Weight	7.2 kg
Environmental	
Operating Temperature	-10°C ~ 55°C (J1900), -10°C ~ 60°C (N2807) with 0.5 m/s airflow (CF & HDD)
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Storage Humidity	90% @40°C; non-condensing
Anti-Vibration	1 Grms / 5~ 500Hz / operation – with HDD
Certification	CE/FCC class A
Power Supply	
DC input	DC 9(min) ~ 30 (max) V w/3-pin terminal block, ATX Power function
LCD	
Display type	17" TFT-LCD, LED
Max Resolution	1280(H) x 1024(V)
Max. Colors	16.7M colors (RGB 6-bits + Hi-FRC data)
Luminance	350 cd/m²
Viewing Angle	170°(H), 160°(V)
Back Light	LED
Back Light MTBF (hours)	—
Touchscreen	
Type	P-CAP/ 5-wire resistive
Light Transmission	P-CAP (≥85%), 5-wire Resistive (80% ± 5%)

9-30 V Power Connector
LAN x 2
USB 2.0 x 3
USB 3.0 x 1
CFast™ Slot x 1
SMA Antenna Hole x 1
HDMI
Power Button
RS-232/422/485
VGA
Remote Power Connector

OMNI Slot

Note: All specifications are subject to change without notice.

OMNI-3175-BT

Dimension

Unit: mm

Ordering Information

	Part Number	Display Type	Max Resolution	Luminance	View Angle	CPU	LAN	USB 3.0	USB 2.0	RS-232/422/485	Storage	RAM	Display	Expansion	Mounting	Power	Operating Temp.	Touch
Panel PC	OMNI-3175HTT-BT-A1-1010	17" TFT LCD	1280 x 1024	350 cd/m²	170°(H) 160°(V)	Intel® J1900, 2 GHz	2	1	3	1	CFast™ x 1, 2.5" SATA HDD x 1	DDR3L, up to 8 GB	VGA x 1	Mini-Card x 2 (Full Size) OMNI Module	VESA 100/ Panel mount	DC 9~30V	-10°C~55°C with airflow	5-wire Resistive
	OMNI-3175HTT-BT-A2-1010	17" TFT LCD	1280 x 1024	350 cd/m²	170°(H) 160°(V)	Intel® N2807, 1.58 GHz	2	1	3	1	CFast™ x 1, 2.5" SATA HDD x 1	DDR3L, up to 8 GB	VGA x 1	Mini-Card x 2 (Full Size) OMNI Module	VESA 100/ Panel mount	DC 9~30V	-10°C~60°C with airflow	5-wire Resistive
	OMNI-3175HTT-BT-A3-1010	17" TFT LCD	1280 x 1024	350 cd/m²	170°(H) 160°(V)	Intel® J1900, 2 GHz	2	1	3	1	CFast™ x 1, 2.5" SATA HDD x 1	DDR3L, up to 8 GB	VGA x 1	Mini-Card x 2 (Full Size) OMNI Module	VESA 100/ Panel mount	DC 9~30V	-10°C~55°C with airflow	Projected capacitive
	OMNI-3175HTT-BT-A4-1010	17" TFT LCD	1280 x 1024	350 cd/m²	170°(H) 160°(V)	Intel® N2807, 1.58 GHz	2	1	3	1	CFast™ x 1, 2.5" SATA HDD x 1	DDR3L, up to 8 GB	VGA x 1	Mini-Card x 2 (Full Size) OMNI Module	VESA 100/ Panel mount	DC 9~30V	-10°C~60°C with airflow	Projected capacitive
Panel Kit	OMNI-317DHTT-KIT-A1-1010	17" TFT LCD	1280 x 1024	350 cd/m²	170°(H) 160°(V)	—	—	—	—	—	—	—	—	—	—	—	-10°C~60°C with airflow	5-wire Resistive
	OMNI-317DHTT-KIT-A2-1010	17" TFT LCD	1280 x 1024	350 cd/m²	170°(H) 160°(V)	—	—	—	—	—	—	—	—	—	—	—	-10°C~60°C with airflow	Projected capacitive
CPU Box Kit	OMNI-BT-KIT-A1-1010	—	—	—	—	Intel® J1900, 2 GHz	2	1	3	1	CFast™ x 1, 2.5" SATA HDD x 1	DDR3L, up to 8 GB	VGA x 1	Mini-Card x 2 (Full Size) OMNI Module	VESA 100/ Panel mount	DC 9~30V	-10°C~55°C with airflow	—
	OMNI-BT-KIT-A2-1010	—	—	—	—	Intel® N2807, 1.58 GHz	2	1	3	1	CFast™ x 1, 2.5" SATA HDD x 1	DDR3L, up to 8 GB	VGA x 1	Mini-Card x 2 (Full Size) OMNI Module	VESA 100/ Panel mount	DC 9~30V	-10°C~60°C with airflow	—

Note: * RAM not included * Panel Mount Kit (Optional)

Packing List

- Phoenix Power Connector
- Product DVD
- OMNI-3175-BT

Optional Accessories

- **AP-0T9789LA1000**
  LCD monitor Stand 230mm, LA-100
- **1702031802**
  Power Cord (US Type)
- **1702031803**
  Power Cord (European Type)
- **170203180E**
  Power Cord (Japanese Type)
- **1255901202**
  19V 120W Power Adapter w/ 3p phoenix block
- **9741317500**
  Panel Mount Kit for OMNI-3175-BT
- **1700021500**
  Remote Switch Cable, 150 cm

OMNI Module (with AAEON Interface)

- **9741215501**
  WiFi & SIM Card Module (Mini-Card WiFi Module is not Included)
- **9741215502**
  Dual LAN Module
- **9741215503**
  USB / COM / LAN Module
- **9741215504**
  COM Port Module
- **9741215505**
  Isolated COM Port module
- **9741215506**
  DIO Module
- **9741215507**
  CAN Bus Module
- **9741215508**
  Audio Module
- **9741215510**
  HMS Kit
- **9741215511**
  COM x 4, DIO x16 Module

Wide Temperature DRAM

- **9761215500**
  2GB Wide Temperature DRAM (-40°C ~ 95°C)
- **9761215501**
  4GB Wide Temperature DRAM (-40°C ~ 95°C)
- **9761215502**
  8GB Wide Temperature DRAM (-40°C ~ 95°C)

**Users should select the wide temperature DRAM above and use wide temperature storage devices if the OMNI panel pc is to be operated at over 40°C.

Note: All specifications are subject to change without notice.

9741215501 - WiFi & SIM Card Module

Mini PCIe Slot x 2, for OMNI Panel PC only (wireless Mini-Card Module Excluded)
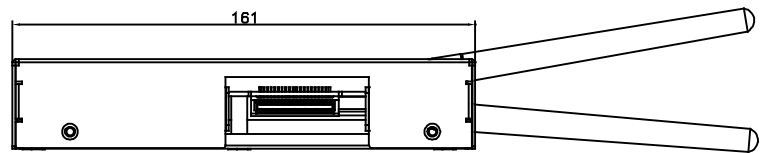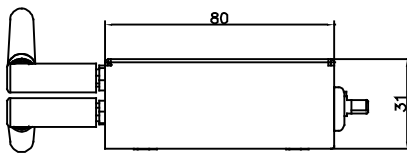
Features

- **Full-size Mini-Card Slot x 2**
- **SIM Card Slot x 2**

Ordering Information

- **9741215501**
  WiFi & SIM Card Module (wireless Mini-Card Module Excluded)

Dimension   Unit: mm

```
80
161
31
```

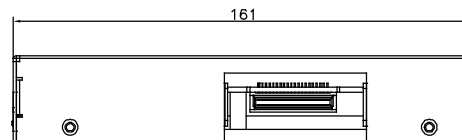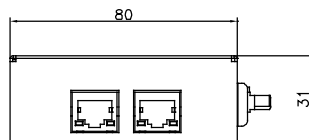# 9741215502 - Dual LAN Module

Gigabit Ethernet x 2, for OMNI Panel PC only

Features

- **Gigabit Ethernet x 2**
- **Intel® i2I Chipset**

Ordering Information

- **9741215502**
  Dual LAN Module

Dimension   Unit: mm

```
80
161
31
```

Note: All specifications are subject to change without notice.

Accessories

9741215503 - USB/COM/LAN Module

USB 2.0 x 2, RS-232/422/485 x 2, Gigabit Ethernet x 1, for OMNI Panel PC only

Features

- USB 2.0 x 2
- RS-232/422/485 x 2 (Selection by External Switch)
- Gigabit Ethernet x 1

Ordering Information

- **9741215503**
  USB/COM/LAN Module

Dimension Unit: mm
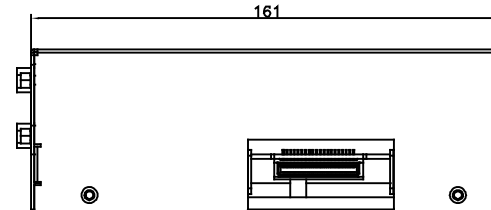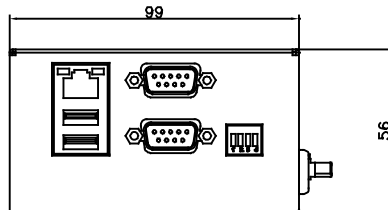
9741215504 - COM Module
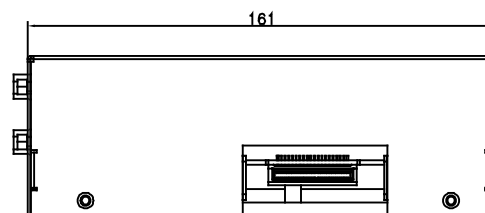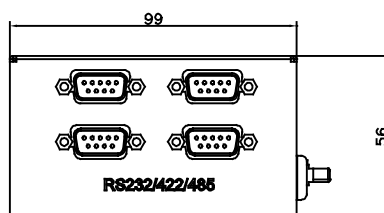
RS-232/422/485 x 4, for OMNI Panel PC only

Features

- RS-232/422/485 x 4
- Selection by Jumpers

Ordering Information

- **9741215504**
  COM Module

Dimension Unit: mm

9741215505 - Isolated COM Module

Isolated RS-232/422/485 x 4, for OMNI Panel PC Only

Features

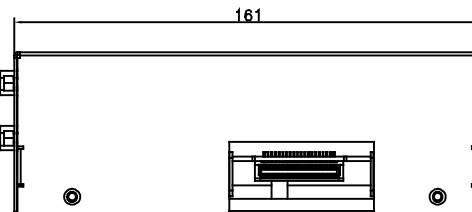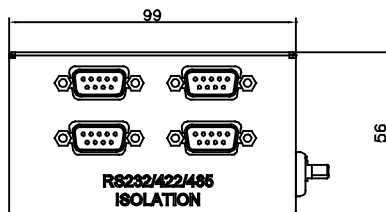- **Isolated RS-232/422/485 x 4**
- **2K Vdc Isolation**
- **Selection by Jumpers**

Ordering Information

- **9741215505**
  Isolated COM Module

Dimension   Unit: mm

9741215506 - DIO Module

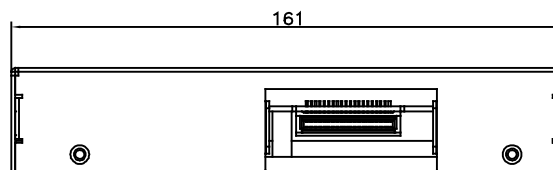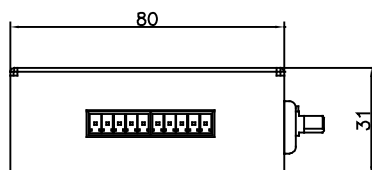DIO without Isolation x 8, for OMNI Panel PC only

Features

- **DIO x 8 (3.3 Vac)**

Ordering Information

- **9741215506**
  DIO Module

Dimension   Unit: mm

Note: All specifications are subject to change without notice.

Accessories

9741215507 - CAN Bus Module

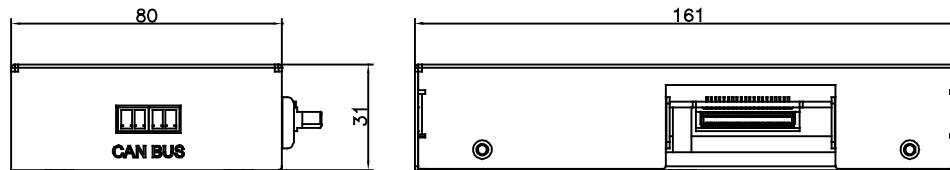CAN Bus with Isolation, for OMNI Panel PC only

Features

- CAN Bus with Phoenix Connectors
- 2K Vdc Isolation
- Provide API and SDK for Windows® OS

Ordering Information

- **9741215507**
  CAN Bus Module

Dimension   Unit: mm

80   161   31

CAN BUS

9741215508 - Audio Module

MIC-In x 1, Line-out x 1, for OMNI Panel PC only

Features

- Mic in x 1
- Line out x 1

Ordering Information

- **9741215508**
  Audio Module

Dimension   Unit: mm

80   161   31

LINE-OUT   MIC

Note: All specifications are subject to change without notice.
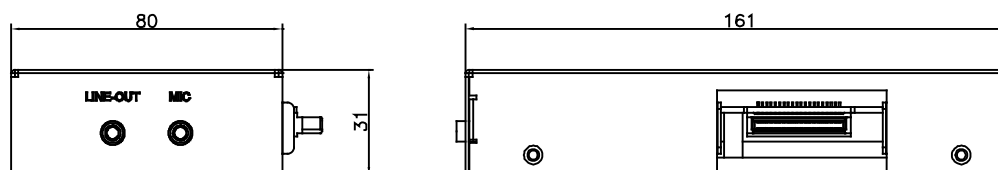
Accessories

9741215510 - HMS Kit

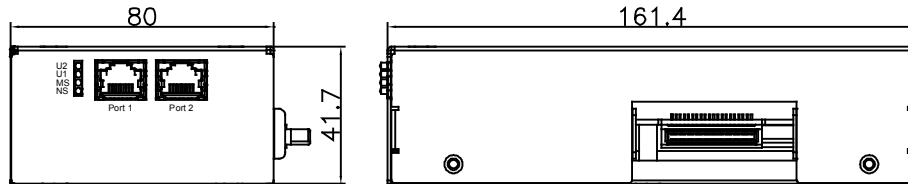10/100 Ethernet x 2, for OMNI Panel PC Only

Features

- **10/100 Ethernet x 2**
- **Support All Major Industrial Ethernet and Fieldbus Networks**

Ordering Information

- **9741215510**
  HMS Kit

Dimension   Unit: mm

9741215511 - COM x 4, DIOx16 Module

RS-485/422/232 x 4, DIOx16 Module, for OMNI Panel PC only

Features

- **Isolated RS-232/422/485 x 4**
- **Digital I/O x 8**

Ordering Information

- **9741215511**
  COM x 4, DIOx16 Module

Dimension   Unit: mm

Note: All specifications are subject to change without notice.