

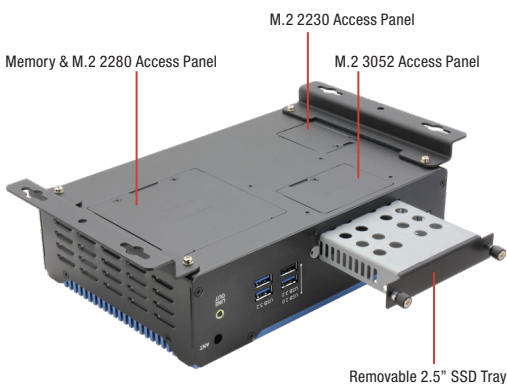
# BOXER-6646-ADP

Fanless Compact Embedded Computer with 12th Generation Intel® Core™ i7/i5/i3 Processor

Front View



Rear View



## Features

- 12th Gen Intel® Core™ i7/i5/i3 Processor SoC
- Dual-Channel DDR5 SODIMM slot
- Support Multi-LAN including 2.5GbE Ethernet
- Support M.2 2280 M Key High speed NVMe SSD
- SuperSpeed+ USB 3.2 Gen2
- Wide Range 10~35V DC input
- Wide Operating Temperature -20~60°C
- Compact Size
- Onboard TPM 2.0

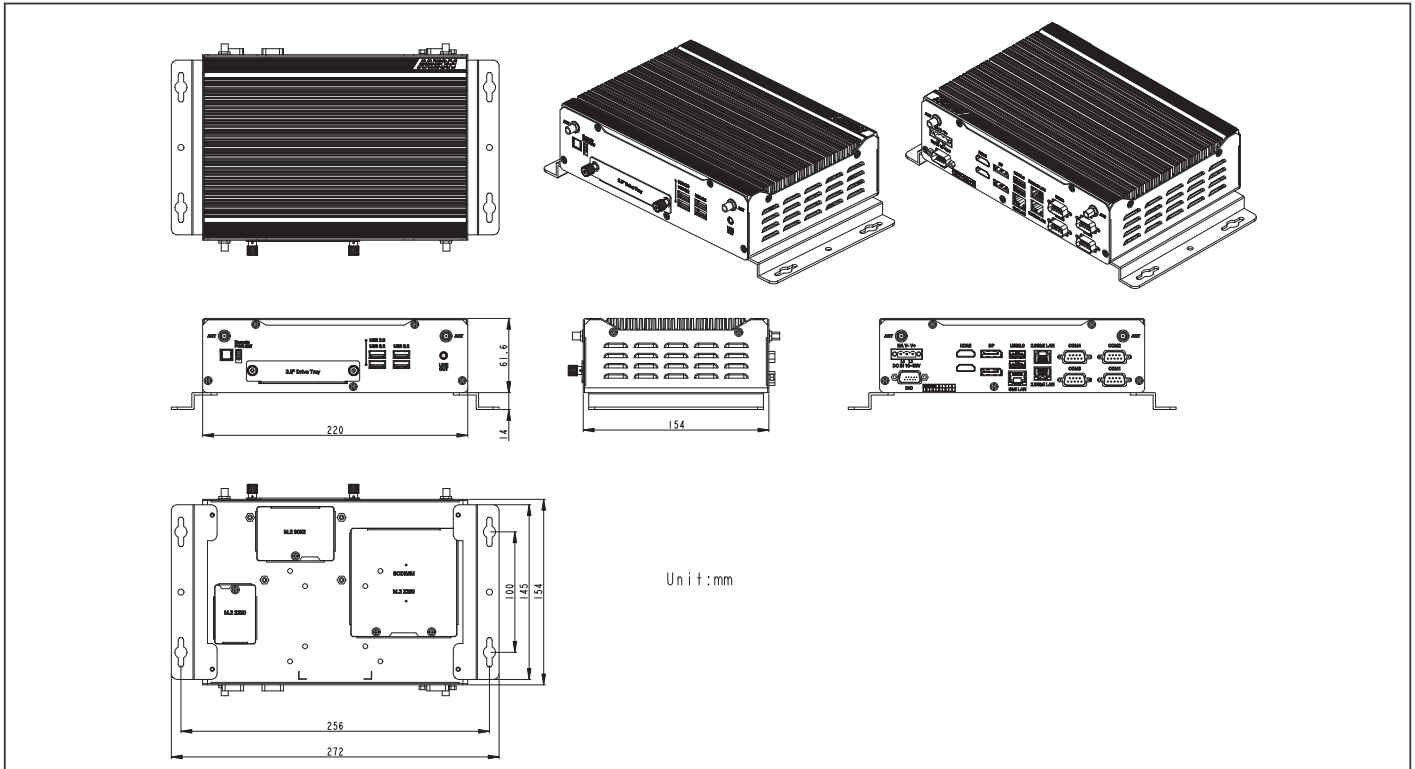


## Specifications

| System                 |  |
|------------------------|--|
| CPU                    | Intel® Core™ i7-1270PE<br>Intel® Core™ i5-1250PE<br>Intel® Core™ i3-1220PE   |
| Chipset                | Intel® System on Chip  |
| System Memory          | DDR5 SODIMM slot x 2   |
| Display Interface      | HDMI x2, Display Port x 2  |
| Storage Device         | Removable 2.5" SATA Drive Bay x 1<br>M.2 2280 M Key NVMe Slot x 1  |
| Ethernet               | RJ-45 x 2 for 2.5GbE LAN i225-LM x 2<br>RJ-45 x 1 for GbE LAN i219-LM x 1  |
| I/O                    | USB Type-A x 3 for USB3.2 Gen2 (10Gbps)<br>USB Type-A x 3 for USB 2.0<br>DB-9 x 4 for RS-232/422/485<br>Line out<br>SMA Antenna Holes x 6<br>DB-9 for DIO 8 bit x 1<br>Power Button with LED indicator x 1<br>Remote Power on/off 2pin connector x 1 |
| Expansion              | M.2 E key 2230 x 1<br>M.2 B Key 3052 x 1 (for 5G/LTE module)   |
| Indicator              | System Power LED x 1   |
| OS support             | Windows® 10 IoT Ent LTSC, Windows® 11 PRO, Ubuntu 22.04  |
| Power Supply           |  |
| Power Requirement      | DC-in 10~35V in 3pin Terminal block connector  |
| Mechanical             |  |
| Mounting               | Wallmount  |
| Dimensions (W x H x D) | 8.66" x 6.06" x 2.42" (220 mm x 154 mm x 61.6 mm)  |
| Gross Weight           | 6.6 lbs. (3.0 kg)  |
| Net Weight             | 4.9 lbs. (2.2 kg)  |
| Environmental          |  |
| Operating Temperature  | -4°F ~140°F (-20°C ~ 60°C), IEC68-2 with 0.5 m/s AirFlow, with wide temperature Memory/Storage   |
| Storage Temperature    | -40°F ~ 176°F (-40°C ~ 80°C)   |
| Storage Humidity       | 5 ~ 95% @ 40°C, non-condensing   |
| Anti-Vibration         | SSD: Random, 3Grms, 5~500Hz  |
| Anti-Shock             | SSD: 50G @ wallmount, Half-sine, 11ms  |
| Certification          | CE/FCC class A   |

## Dimension

Unit: mm



## Ordering Information

| Part Number            | CPU       | PCH | LAN | USB 3.0             | USB 2.0 | RS-232 | RS-232/422/485 | Digital I/O | Audio    | Storage   | Display            | Expansion  | Mounting  | Power  | Operation temp.   |
|------------------------|-----------|-----|-----|---------------------|---------|--------|----------------|-------------|----------|---|--------------------|--|-----------|--------|---|
| BOXER-6646-ADP-A1-1010 | i3-1220PE | SoC | 3   | USB 3.2 (10Gbps) x3 | 3       | —      | 4              | 8bit        | Line-out | 2.5" SATA-III Drive bay x 1<br>M.2 2280 M Key NVMe Slot x 1 | HDMI x 2<br>DP x 2 | M.2 E-Key 2230 x1<br>M.2 B-Key 3052 x1<br>w/ SIM Slot x1 | Wallmount | 10~35V | -4°F ~ 140°F (-20°C ~ 60°C)<br>with 0.5 m/s airflow, with wide temperature Memory/Storage |
| BOXER-6646-ADP-A2-1010 | i5-1250PE | SoC | 3   | USB 3.2 (10Gbps) x3 | 3       | —      | 4              | 8bit        | Line-out | 2.5" SATA-III Drive bay x 1<br>M.2 2280 M Key NVMe Slot x 1 | HDMI x 2<br>DP x 2 | M.2 E-Key 2230 x1<br>M.2 B-Key 3052 x1<br>w/ SIM Slot x1 | Wallmount | 10~35V | -4°F ~ 140°F (-20°C ~ 60°C)<br>with 0.5 m/s airflow, with wide temperature Memory/Storage |
| BOXER-6646-ADP-A3-1010 | i7-1270PE | SoC | 3   | USB 3.2 (10Gbps) x3 | 3       | —      | 4              | 8bit        | Line-out | 2.5" SATA-III Drive bay x 1<br>M.2 2280 M Key NVMe Slot x 1 | HDMI x 2<br>DP x 2 | M.2 E-Key 2230 x1<br>M.2 B-Key 3052 x1<br>w/ SIM Slot x1 | Wallmount | 10~35V | -4°F ~ 140°F (-20°C ~ 60°C)<br>with 0.5 m/s airflow, with wide temperature Memory/Storage |

## Packing List

- BOXER-6646-ADP x1
- Wallmount Bracket x 2
- 3 Pin DC-In Power Connector x 1
- Remote ON/OFF Connector x 1
- Screw Package x 1

## Optional Accessories

- 125590120B  
19V 120W AC to DC Adapter
- 1702031802  
Power Cord (US Type)
- 1702031803  
Power Cord (Europe)
- 170203180E  
Power Cord (Japan)