BOXER-6646-ADP

Fanless embedded box PC with Intel® Core™ 13th/12th Gen. i7/i5/i3 CPUs

BRESSNER
A ONE STOP SYSTEMS COMPANY

Features

- Intel® Core™ 13th/12th Gen. CPU
- 2x DDR5 SO-DIMM up to 64GB
- Intel® System on Chip (SoC)
- Supports Windows® 11 PRO 64-bit
- Supports Hailo-8™ M.2 2280 AI accelerator module (optional)

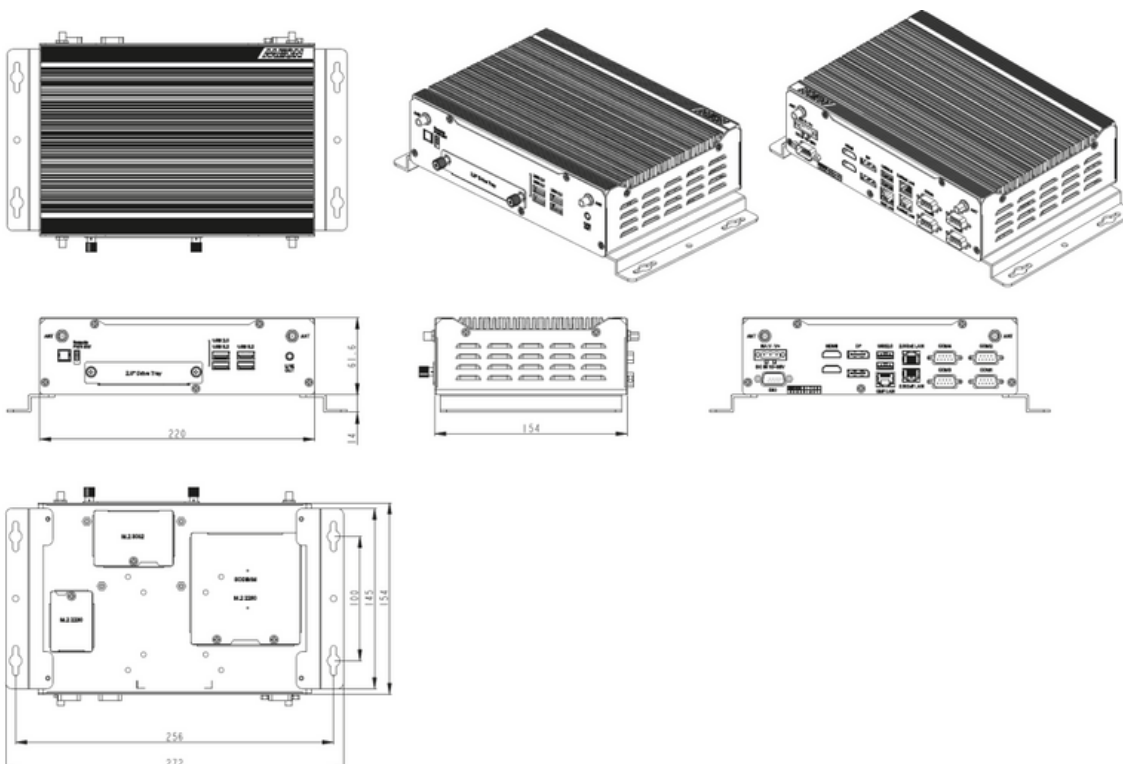## BOXER-6646-ADP – Compact and flexible 12th Gen CPU all-in-one embedded PC

The new BOXER-6646-ADP is a powerful and compact, as well as an efficient and expandable multi-purpose solution. The embedded computer is powered by 12th Gen. Intel® Core™ processors and includes dual-channel DDR5 support and Intel® Iris® Xe graphics. Designed to provide flexibility and utility to users across multiple vertical markets, the BOXER-6646-ADP includes industry-leading features such as multiple 2.5GbE LAN ports, three 10Gbps USB 3.2 slots, and a quad display interface with HDMI 1.4 and DisplayPort 1.4.

Maximum performance in a convenient form factor

The extremely powerful system comes in a compact form factor (220mm x 154mm x 61.6mm) and features easy-access expansion options. The enclosure features a maintenance window on the bottom of the chassis that provides simple access to the system's M.2 3052, M.2 2230 and M.2 2280 expansion ports and a more convenient way to install 5G, Wi-Fi and NVMe modules.

Similar to the larger BOXER-6645-ADS with 65W CPU, the more compact BOXER-6646-ADP model benefits from optimized resilience which enables this model to be perfectly suited for deployment in harsh environments. These features include an extended DC input range of 10 ~ 35V and an operation temperature of -20°C ~ 60°C, making the device applicable for industrial AMR and automation purposes. In addition, the BOXER-6646-ADP features reverse power protection, over/under voltage and current protection, and over voltage and short circuit protection to ensure consistent operation even in environments with variable power sources.
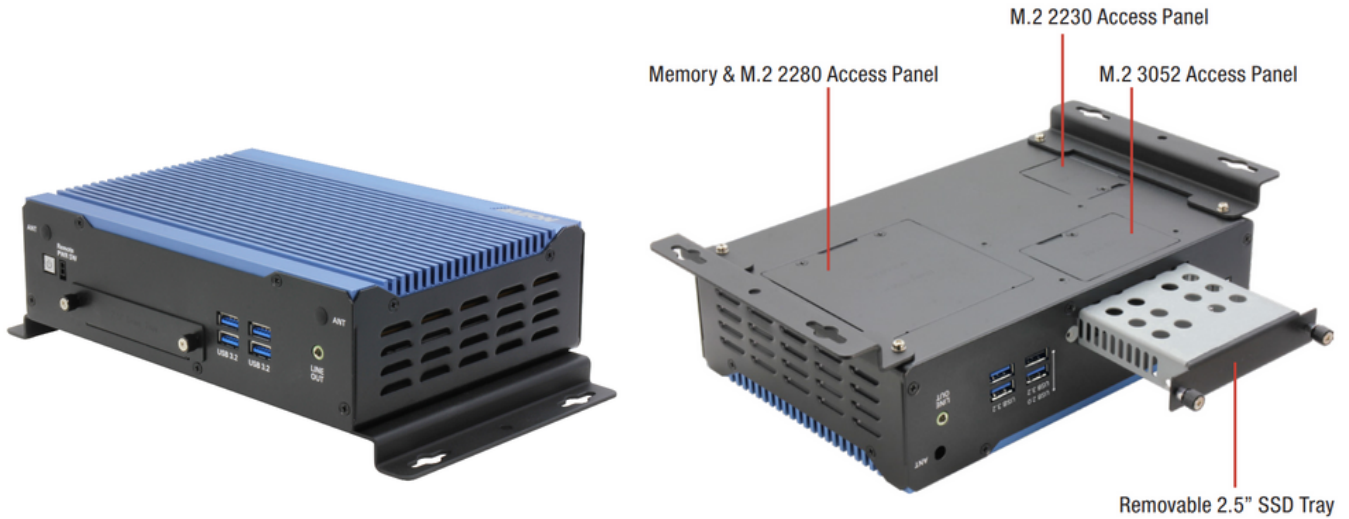
Drawing (mm)

BOXER-6646-ADP

Fanless embedded box PC with Intel® Core™ 13th/12th Gen. i7/i5/i3 CPUs

Specifications	BOXER-6646-ADP
SYSTEM	
CPU	13th Generation Intel® Core™ Processors: Intel® Core™ i7-1370PE Intel® Core™ i5-1350PE Intel® Core™ i3-1320PE 12th Generation Intel® Core™ Processors: Intel® Core™ i7-1270PE Intel® Core™ i5-1250PE Intel® Core™ i3-1220PE
Chipset	Intel® System on Chip
RAM	2x DDR5 SO-DIMM up to 64GB
Storage	1x Removable 2.5" SATA Drive Bay 1x M.2 2280 M-key NVMe slot
Expansion	1x M.2 E-key 2230 1x M.2 B-key 3052 (for 5G/LTE module)
Operating System	Windows® 10 IoT Ent LTSC Windows® 11 PRO Linux Ubuntu 22.04
INTERFACE	
Ethernet	2x RJ-45 for 2.5GbE LAN i225-LM 1x RJ-45 for GbE LAN i219-LM
USB	3x USB 3.2 Gen 2 (10Gbps) – USB type A 3x USB 2.0 – USB type A
COM	4x DB-9 for RS-232/422/485
Digital I/O	1x DB-9 for DIO 8-bit
Video	2x HDMI 2x DisplayPort
Audio	1x Line-out
Power	3-pin terminal block connector
ENVIRONMENTAL	
Cooling	Fanless
Power Supply	DC input 10 ~ 35V
Remote Control & LED	1x System Power LED
Operating Temperature	-20°C ~ 60°C, according to IEC68-2 with 0.5 m/s AirFlow, with wide temperature memory/storage
Storage Temperature	-40° ~ 80°C
Vibration / Shock Resistance	Vibration: SSD: Random, 3Grms, 5~500Hz Shock: SD: 50G @ wallmount, Half-sine, 11ms
Humidity	5 ~ 95% @ 40°C, non-condensing
Dimensions	220 (W) x 154 (D) x 61.6 (H)mm
Weight	3 kg (gross) 2.2 kg (net)
Mounting	Wallmount
Certifications	CE/FCC Class A

BOXER-6646-ADP

Fanless embedded box PC with Intel® Core™ 13th/12th Gen. i7/i5/i3 CPUs

BRESSNER
A ONE STOP SYSTEMS COMPANY

Memory & M.2 2280 Access Panel
M.2 2230 Access Panel
M.2 3052 Access Panel
Removable 2.5" SSD Tray

Ordering Information	BOXER-6646-ADP-A1-1010	BOXER-6646-ADP-A2-1010	BOXER-6646-ADP-A3-1010	BOXER-6646-ADP-A4-1010	BOXER-6646-ADP-A5-1010	BOXER-6646-ADP-A6-1010
CPU	Intel® Core™ i3-1220PE	Intel® Core™ i5-1250PE	Intel® Core™ i7-1270PE	Intel® Core™ i3-1320PE	Intel® Core™ i5-1350PE	Intel® Core™ i7-1370PE
Chipset	SoC					
Ethernet	3x Gigabit Ethernet ports					
USB	3x USB 3.2 (10GB/s)3x USB 2.0					
Digital I/O	8-bit					
COM	4x DB-9 for RS-232/422/485					
Audio	1x Line-out					
Storage	1x 2,5"-SATA III drive bay1x M.2 2280 M-key NVMe slot					
Video	2x HDMI2x DisplayPorts					
Expansion	1x M.2 E-Key 22301x M.2 B-Key 3052 with SIM slot					
Mounting	Wallmount					
Power	10 ~ 35V DC					
Operating Temperature	-20°C ~ 60°C, according to IEC68-2 with 0.5 m/s AirFlow, with wide temperature memory/storage					

Scope of delivery

- 2x Wall mount brackets
- 1x 3-pin DC-in power connector
- 1x Remote On/Off connector
- 1x Screw package
- 1x BOXER-6646-ADP

Optional accessories

- 120W Power adapter // SKU: 125590120B
- Power cable (US type) // SKU: 17020231802
- Power cable (EU type) // SKU: 1702031803
- Power cable (JPN type) // SKU: 170203180E

www.bressner.de