



649.00 EUR

incl. 19% VAT, plus [shipping](#)

- Intel Apollo Lake !
- 1x LAN + 2x POE !
- Fanless !
- Modular !



Support: [Specifications](#) | [Expansion modules](#) | [Dimensions](#)

MiTAC's MB1-10AP Embedded Box PC is the next generation box pc with Intel® Apollo Lake processor. The whole new SOC structure packs more powerful capability for your tasks or applications.

The MB1-10AP's 1.5 liter fan-less chassis design and expandable module design give it the flexibility to adapt to every workspace and environment, whether implemented as an Embedded Box PC. Din Rail mount support allows it to be used in factory environment and application. VESA mount support allows for space-saving and rear-mounting on flat-screen displays. Flexibilities also mean a rich array of I/O ports (including 3 x Ethernet RJ45, 4 x USB 3.0, 1 x HDMI, 2 x RS232/422/485, 1 x 3PIN Terminal Block Power Input, 1 x Expansion Socket) to add a variety of peripherals. Storage expandability is supported for high-density hard drives in 2.5" HDD bracket design. Two mPCIe (one shared with mSATA) slots provide the support of SSD and wireless interfaces which allow effortless connection to Wi-Fi and Bluetooth networks, and 4G connectivity. HDMI and one additional expansion display module extend your visual experience with support for dual displays.

Optional Modules

MS-01VGA-D10 VGA Port Expansion Module

MS-01DVI-D10 DVI-D Port Expansion Module

MS-01DPN-D10 DisplayPort Expansion Module

MS-02COM-D10 Expansion Module with 2 x RS232 / 422 / 485

MS-08DIO-T10 Expansion Module with 8-bit Isolated DIDO (4 x DI, 4 x DO)

MB1-10AP (MB1-10AP) Specifications

MECHANICAL

THERMAL DESIGN	Fanless
MOUNTING	Wallmount / 100 mm x 100 mm VESA Mount & Din Rail Mount Combo Kit (Optional)
DIMENSIONS (W X D X H)	6.9" x 4.1" x 2.2" (170 x 105 x 57 mm)
WEIGHT	1.3kg (2.8 lb)
MATERIAL	Top cover: Aluminum Alloy / Bezel and chassis: Steel
CPU	Intel® Apollo Lake-M N4200 / N3350 Processor
CHIPSET	Intel® SoC Integrated
SYSTEM MEMORY	DDR3L 1866 MHz / 1 x 204-pin SO-DIMM / Max. 8GB (Non-ECC)
GRAPHICS	Intel® HD Graphics
DISPLAY INTERFACE	HDMI 1.4 / Optional DisplayPort/VGA/DVI-D by Expansion Module
STORAGE SLOT	1 x 2.5 HDD / SSD (Default w/ HDD Bracket) / 1 x mSATA
ETHERNET	2 x Intel® I210-IT Giga LAN (2 x PoE LAN: Optional) / 1 x Realtek RTL8154 LAN (Up to 480Mbps)
AUDIO	Realtek® ALC662
I/O CHIPSET	Nuvoton NCT6116D
TPM	Nuvoton NPCT750AAAYX TPM2.0 (Optional)

SYSTEM

EXPANSION SLOT	LTE/Wireless: Mini PCIe Full size (USB / PCIe), w/ SIM Card Holder (w/ Full to Half size adapter plate) / Storage: mPCIe Full size (USB / PCIe / SATA)
INTERNAL SPEAKER	1 x Buzzer
INDICATOR	Power Button / Power LED / HDD LED
FRONT I/O	1 x HDMI 1.4 / 4 x USB 3.0 / 2 x SMA Antenna (Optional for WiFi/LTE function) / 1 x Xpansion Module Door / 2 x RS232 / 422 / 485 (Support Power 5V / 12V) 3 x RJ-45 / 1 x Mic-in / 1 x Line-out / 1 x 3-pin Terminal
REAR I/O	Block Power Input / 2 x SMA Antenna (Optional for WiFi/LTE function)
WATCHDOG TIMER	1~255 steps by software program
POWER INPUT	8~24V Wide Range DC Input w/ Terminal Block Connectivity
POWER ADAPTER	Optional

POWER REQUIREMENT

ENVIRONMENTAL	OPERATING TEMPERATURE	-25°C to 70°C (For non-PoE SKU) / -25°C to 60°C (For PoE SKU) / with 0.7m/s Air Flow and Wide Temperature
	OPERATING HUMIDITY	Memory/Storage 10% ~ 90% R/H (Non-condensing)
	VIBRATION RESISTANCE	Operating: 5Hz~500Hz / 5Grms / 3Axis (w/ SSD, according to IEC60068-2-64)
	SHOCK RESISTANCE	Operating: 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
	CERTIFICATION	CE / FCC Class A
OS	OS SUPPORT	Windows® 10 64-bit / Linux (support by request)
PACKING LIST	PACKAGE	1 x Driver CD / 1 x Quick Installation Guide / 1 x Embedded System / 1 x Wall Mount Brackets (2PCS in 1 set) / 1 x 3 pin Terminal Block Power Connector / 1 x Full to Half Size mPCIe Card Adapter Plate