

UBX-210K

Multi-functional Box Computer with Intel ADL-N – N97, N305 Processor



DeviceOn/iService

Features

- Modular detachable I/O board features in rich and flexible I/O deployment
- Unique X-shaped fin design enhances system heat dissipation; the mounting direction is not limited by airflow
- Equipped with TPM2.0 chip for data encryption enhancement
- Supports one DDR5 SODIMM slot and two M.2 2280 SATA SSD slots
- Can be integrated with optional WiFi and Bluetooth combo module
- Supports Windows 10 LTSC 21H2, Windows 11 LTSC 24H2, and Linux

Introduction

Advantech UBX-210K is a compact x86-based computer with detachable I/O boards that allow flexible I/O deployment. Rich I/O types and quantities fulfill different peripherals connections without any extension hub or converter. Moreover, the unique X-shaped fin design enables better system heat dissipation and allows horizontal and vertical setups. Such a compact design but powerful system performance satisfies retail demands, like POS systems and self-service kiosks in hypermarkets, quick-service restaurants, hotels, and public spaces. Due to multiple I/O types and quantities, the UBX-210K is also appropriate for cross-sector applications. The UBX-210K is a cost-effective solution for retail and semi-industry scenarios.

Specifications

Model	UBX-210K		
Processor	N97 Core i3, N305		
TPM	TPM 2.0		
Memory	DDR5-4800 SO-DIMM *1, Up to 16 GB (non-ECC)		
Resolution	USB-C: support up to 4K UHD (4096 x 2160@60Hz); HDMI 1 and 2: support up to 4K UHD (4096 x 2160@60Hz)		
Front I/O	USB	USB 3.2 Gen1 Type A *2	
	COM	COM *1 (RS232 only)	
	Button	Power Pushbutton *1	
	LED	Data access LED *1	
Rear I/O	Video	USB-C *1 HDMI2.1 *2 VGA *1 (Option BOM)*	
	Audio	Line-out *1	
	LAN	LAN 1/2: Intel i226; up to 2.5 Gbps	
	USB	USB 3.2 Gen1 Type A *2 USB 2.0 Type A *2 24V Powered USB *1 12V Powered USB *2	
	I/O Type A**	5V/12V Powered COM *3 (Setting via jumpers; default: 5V) 12V/24V RJ12 for Cash Drawer *1 (default: 24V) DC 24V Power DIN4 *1	
	I/O Type B**	USB 2.0 Type A *4 COM *3 (RS232) DC 19V Power DIN4 *1	
	Expansion	WiFi/BT	M.2 E-Key 2230 *1
	Storage	M.2 M-Key 2280 *2	
Power Consumption	I/O Type A	N97 MB: Full loading: 144W Idle: 11W	Core i3 N305 MB: Full loading: 154W Idle: 13W
	I/O Type B	N97 MB: Full loading: 35W Idle: 11W	Core i3 N305 MB: Full loading: 45W Idle: 13W
Mounting Option	Desktop/Wall/VESA		
Wake on LAN	LAN 1		
Operating System	Windows 10 IoTEnt LTSC Windows 11 IoT Linux		
Environment	Operating Temperature	0~ 45 °C (No powered USB ports are used), with 0.7m/s airflow	
	Storage Temperature	0~ 35 °C (All powered USB ports are used), with 0.7m/s airflow -20~ 60 °C	
Physical	Dimensions (W x D x H)	234 x 145.77 x 58 mm	
	Weight	NW: 2.3 Kg GW: 3.0 Kg	
Software	SUSI, DeviceOn		
Certificate	CE, FCC Class B, CCC, BSMI, RF RED, EN 62368, ErP, CB, UL		

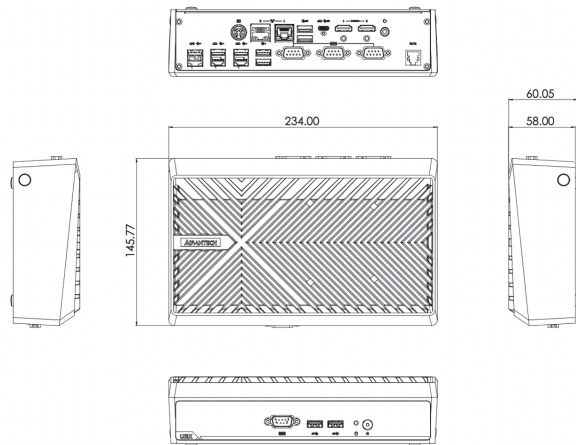
Note:

1. A VGA connector will substitute for the COM port at the front side of the VGA BOM. Due to CPU limits, the UBX-210 with VGA BOM supports triple display.
2. Only one of I/O Type A and I/O Type B can be installed.

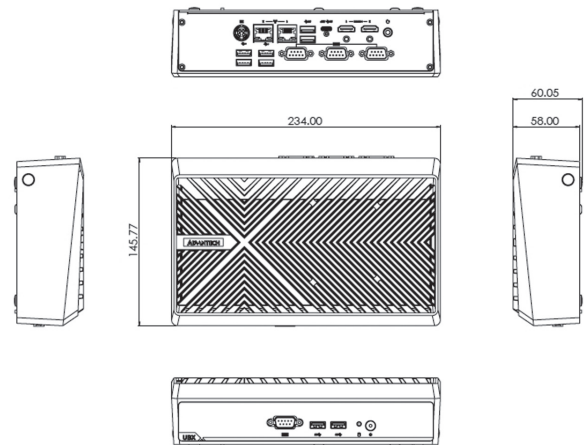
Dimensions

Unit: mm

UBX-210K with I/O Type A



UBX-210K with I/O Type B



Ordering Information

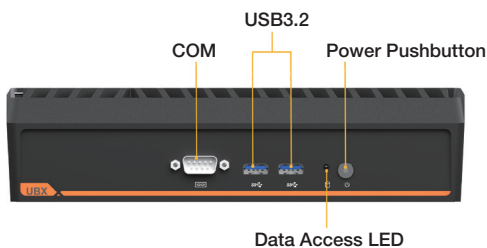
P/N	Description
UBX-210K-BN100	UBX-210K ADL-N N97, 3PUSB, 3Powered COM barebone
UBX-210K-BN200	UBX-210K ADL Core i3 N305, 3PUSB, 3Powered COM barebone
UBX-210K-BN101	UBX-210K ADL-N N97, 8USB, 4COM barebone
UBX-210K-BN201	UBX-210K ADL Core i3 N305, 8USB, 4COM barebone
UBX-210K-UN100	UBX-210K ADL-N N97, 3PUSB, 3Powered COM barebone, Made in TW
UBX-210K-UN200	UBX-210K ADL Core i3 N305, 3PUSB, 3Powered COM Barebone, Made in TW
UBX-210K-UN101	UBX-210K ADL-N N97, 8USB, 4COM barebone, Made in TW
UBX-210K-UN201	UBX-210K ADL Core i3 N305, 8USB, 4COM barebone, Made in TW

UBX-210K Barebone Package Content

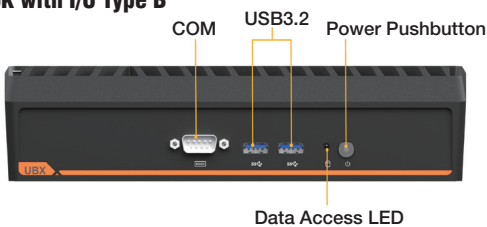
- 1 unit UBX-210K Box Computer
- 1 pcs DC24V/180W Power adapter or 1 pcs DC19V/90W Power Adapter
- 1 set of Wall Mount Kit
- 1 pcs Thermal Pad for DDR5 Memory
- 2 pcs Thermal Pad for SSD

Front View

UBX-210K with I/O Type A

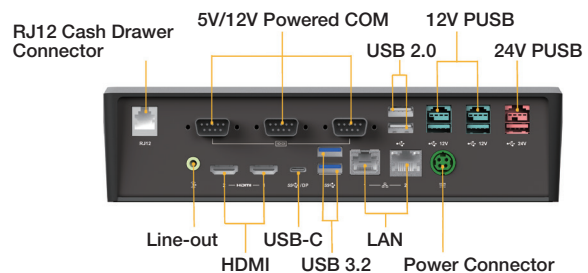


UBX-210K with I/O Type B

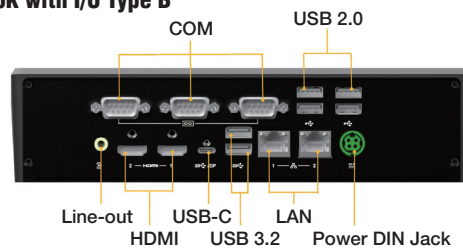


Rear View

UBX-210K with I/O Type A



UBX-210K with I/O Type B



Optional Accessories

Product	P/N	Usage	Description
DDR5 Memory	SQR-SD5N8G4K8HNGAG	1	262pin SODIMM DDR5 4800 8GB 1.1v 1Gx16(0-95)
	SQR-SD5N16G4K8HNAG	1	262pin SODIMM DDR5 4800 16GB 1.1v 2Gx8(0-95)
	SQR-SD5S16G4K8SNAB	1	262pin SODIMM DDR5 4800 16GB 1.1v 2Gx8(0-95)
	AQD-SD5V8GN48-SC	1	8GB SO-DDR5-4800 1GX16 1.1V SAM
	AQD-SD5V16GN48-SB	1	16GB SO-DDR5-4800 2GX8 1.1V SAM
Storage	AMF-S8BV1F64GDM2C	1 or 2	AMF, M.2 2280 SATA SSD, 64GB, 3D TLC BiCS5, (0~70C)
	AMF-S8BV1F128GDM2C	1 or 2	AMF, M.2 2280 SATA SSD, 128GB, 3D TLC BiCS5, (0~70C)
	AMF-S8BV1F256GDM2C	1 or 2	AMF, M.2 2280 SATA SSD, 256GB, 3D TLC BiCS5, (0~70C)
	AMF-S8BV2F512GDM2C	1 or 2	AMF, M.2 2280, SATA SSD, 512GB, 3D TLC BiCS5, (0~70C)
	AMF-S8BV4F1TDM2C	1 or 2	AMF, M.2 2280, SATA SSD, 1TB, 3D TLC BiCS5, (0~70C)
	AMF-S8BV4F2TDM2C	1 or 2	AMF, M.2 2280, SATA SSD, 2TB, 3D TLC BiCS5, (0~70C)
	SQF-S8BV1-64GDSDM	1 or 2	SQF SATA M.2 2280 650-D 64G 3D TLC BiCS5 (-20~85°C)
	SQF-S8BV1-128GDSDM	1 or 2	SQF SATA M.2 2280 650-D 128G 3D TLC BiCS5 (-20~85°C)
	SQF-S8BV1-256GDSDM	1 or 2	SQF SATA M.2 2280 650-D 256G 3D TLC BiCS5 (-20~85°C)
	SQF-S8BV2-512GDSDM	1 or 2	SQF SATA M.2 2280 650-D 512G 3D TLC BiCS5 (-20~85°C)
	SQF-S8BV4-1TDSDM	1 or 2	SQF SATA M.2 2280 650-D 1T 3D TLC BiCS5 (-20~85°C)
	SQF-S8BV4-2TDSDM	1 or 2	SQF SATA M.2 2280 650-D 2T 3D TLC BiCS5 (-20~85°C)
	96FD80-N064-TR72	1 or 2	Transcend M.2 2280 64GB SATA3 SAM MLC
	96FD80-N128-TR72	1 or 2	Transcend M.2 2280 128GB SATA3 SAM MLC
96FD80-N256-TR72	1 or 2	Transcend M.2 2280 256GB SATA3 SAM MLC	
WiFi, BT Combo Module, antenna	UBX-200P-W00E	1	UBX-210, Wi-Fi 5+ BT Module, 2.4/5GHz M.2 2230
Power Cord	1700001524	1	3P UL 10A 125V 180cm(American)
	170203183C	1	3P EU (WS-010+083) 183CM(European)
	1700018553	1	Power Cord SAA 3P 2.5A 250V 183cm(Australia)
	1700025113-11	1	Power Cord ISI 3P 2.5A 250V 180cm(India)
	1700018409	1	Power Cord KCC 2P 2.5A 250V 183cm(Korea,Russia)
	1700024849-01	1	Power Cord BSMI 3P 2.5A 125V 180cm(Taiwan)
	170203180A-01	1	Power Cord ASTA 3P 2.5A 250V 183cm
	1700008921	1	3P 1.8M PSE 7A 125V(Japan)
	1700019146	1	Power Cord CCC 3P 2.5A 250V 183cm
Operating System	20708WX1ES0030	1	Img WIN10 LTSC 2021-ELE UBX-210K V1.00 7MUI x64
	20708WX1VS0031	1	Img WIN10 LTSC 2021-VLE UBX-210K V1.00 7MUI x64
	20708WLE1S0002	1	WIN11 LTSC_24H2_ELE UBX-110/210K(N) V1.00 7MUI
	20708WLV1S0002	1	WIN11 LTSC_24H2_VLE UBX-110/210K(I3) V1.00 7MUI
	20708U22DS0005	1	UBX-210K Ubuntu 22.04 V1.01