

# UBX-210H

## Multi-functional Box Computer with Intel 11th Gen 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
- Two M.2 2280 SSD slots to support RAID 0/1 that offers a complete data backup solution
- Can be integrated with optional WiFi and Bluetooth combo module
- Support Windows 10 IoT LTSC, Windows 11 IoT, or Linux

### Introduction

Advantech UBX-210H 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.

### Specifications

Model		UBX-210H
Processor		Celeron 6305E Core i3, 1115G4E Core i5, 1145G7E Core i7, 1185G7E
TPM		TPM 2.0
Memory		DDR4-3200 SO-DIMM *1, Up to 64GB (non-ECC)
Resolution		USB-C: support up to 8K UHD (7680 x 4320 @ 60Hz); HDMI 1 and 2: support up to 4K UHD (4096 x 2160@60Hz)
Front I/O	USB	USB3.2 Gen 2 Type A *2
	COM	COM *1 (RS232/422/485 by BIOS)
	Button	Power Pushbutton *1
	LED	Data access LED *1
Rear I/O	Video	USB-C *1 HDMI2.0b *2
	Audio	Line-out *1
	LAN	LAN 1: Intel i219; 10/100/1000 Mbps; LAN 2: Intel i225; up to 2.5 Gbps
	USB	USB 3.2 Gen 2 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: 0V) 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
Mounting Option		Desktop/Wall/VESA
Wake on LAN		LAN 1
Intel vPro		Supported (Core i5, and i7 only)
Operating System		Windows 10 IoTEnt LTSC Windows 11 IoT
		Linux
Environment	Operating Temperature	0~ 45 °C** with airflow 0.7m/s
	Storage Temperature	-20 ~ 60 °C
Physical	Dimensions (W x D x H)	234 x 145.77 x 58 mm
Software		SUSI, DeviceOn
Certificate		CE, FCC Class B, CCC, BSMI, RF RED, EN 62368, ErP, CB, UL, BIS

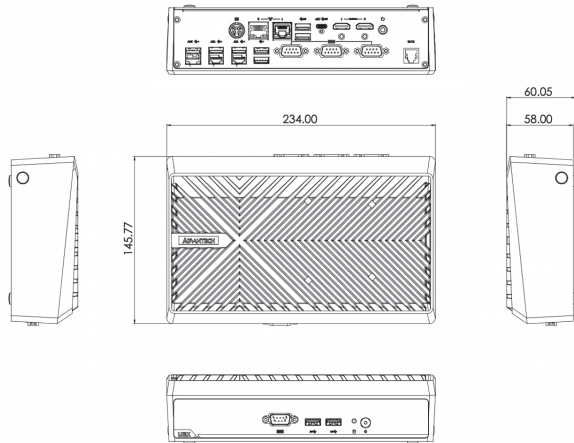
\*Only one of I/O type A and I/O Type B can be installed.

\*\* When using parts of powered USB ports, the maximum operating temperature is between 40 °C and 45 °C; if using all of the powered USB ports, the maximum operating temperature is 35 °C.

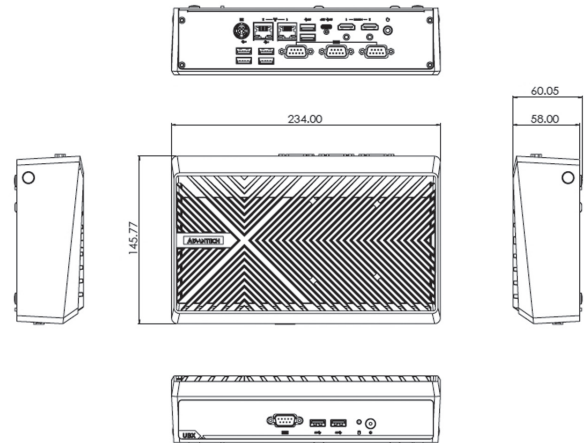
## Dimensions

Unit: mm

### UBX-210H with I/O Type A



### UBX-210H with I/O Type B



## Ordering Information

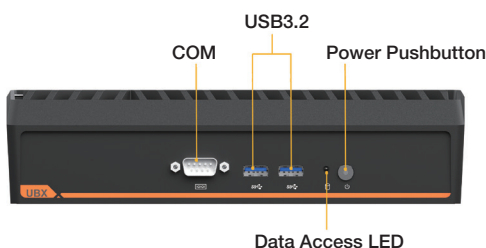
PN	Description
UBX-210H-BCL00	UBX-210H, Celeron 6305E, PUSB PCOM barebone
UBX-210H-BI300	UBX-210H Core i3 1115G4E, PUSB PCOM barebone
UBX-210H-BI500	UBX-210H Core i5 1145G7E, PUSB PCOM barebone
UBX-210H-BI700	UBX-210H Core i7 1185G7E, PUSB PCOM barebone
UBX-210H-BCL01	UBX-210H, Celeron 6305E, 8USB, 4COM barebone
UBX-210H-BI301	UBX-210H Core i3 1115G4E, 8USB, 4COM barebone
UBX-210H-BI501	UBX-210H Core i5 1145G7E, 8USB, 4COM barebone
UBX-210H-BI701	UBX-210H Core i7 1185G7E, 8USB, 4COM barebone
UBX-210H-UCL00	UBX-210H, Celeron 6305E, PUSB PCOM barebone, TW
UBX-210H-UI300	UBX-210H Core i3 1115G4E, PUSB PCOM barebone, TW
UBX-210H-UI500	UBX-210H Core i5 1145G7E, PUSB PCOM barebone, TW
UBX-210H-UI700	UBX-210H Core i7 1185G7E, PUSB PCOM barebone, TW
UBX-210H-UCL01	UBX-210H, Celeron 6305E, 8USB, 4COM barebone, TW
UBX-210H-UI301	UBX-210H Core i3 1115G4E, 8USB, 4COM barebone, TW
UBX-210H-UI501	UBX-210H Core i5 1145G7E, 8USB, 4COM barebone, TW
UBX-210H-UI701	UBX-210H Core i7 1185G7E, 8USB, 4COM barebone, TW

## UBX-210H Barebone Package Content

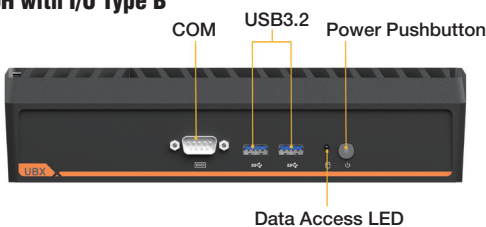
PN	Description
-	1 unit UBX-210H Multi-Functional Box Computer
XUSC365-ADP180WBB	1 pcs DC24V/180W Power Adapter (when configuring with the I/O Type A)
XUSM-FSP090-DBBN3	1 pcs DC19V/90W Power Adapter (when configuring with the I/O Type B)
-	1 set of Wall Mount Kit
1990028994N000	1 pcs Thermal Pad for DDR4 Memory
1990028994N000	2 pcs Thermal Pad for SSD

## Front View

### UBX-210H with I/O Type A

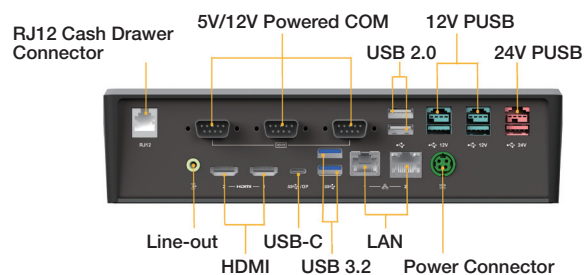


### UBX-210H with I/O Type B

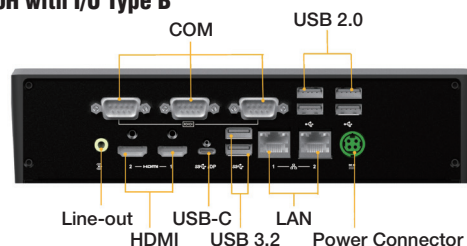


## Rear View

### UBX-210H with I/O Type A



### UBX-210H with I/O Type B



## Optional Accessories

Product	P/N	Usage	Description
DDR4 Memory	AQD-SD4U4GN32-SP	1	4GB SO-DDR4 3200 512MX16 SAM
	AQD-SD4U4GN32-SP1	1	4G SO-DDR4-3200 512X16 1.2V SAM 0~95°C
	AQD-SD4U8GN32-SE	1	8GB DDR4 SODIMM-3200 1Gx8 SAM
	AQD-SD4U16GN32-SE	1	16GB DDR4 SODIMM-3200 1Gx8 SAM
	AQD-SD4U32GN32-SB	1	32GB DDR4 SODIMM-3200 2Gx8 SAM
	SQR-SD4N4G3K2SNPCB	1	260pin SODIMM DDR4 3200 4GB 1.2v 512x16 (0-85°C)
	SQR-SD4N8G3K2SNBCB	1	260pin SODIMM DDR4 3200 8GB 1.2v 1Gx8 (0-85°C)
	SQR-SD4N16G3K2SNCB	1	260pin SODIMM DDR4 3200 16GB 1.2v 1Gx8 (0-85°C)
	SQR-SD4N32G3K2SNAB	1	260pin SODIMM DDR4 3200 32GB 1.2v 2Gx8 (0-85°C)
	SQR-SD4S8G3K2SNBB	1	260pin SODIMM DDR4 3200 8GB 1.2v 1Gx8 (0-85°C)
	SQR-SD4S16G3K2SNBB	1	260pin SODIMM DDR4 3200 16GB 1.2v 1Gx8 (0-85°C)
SQR-SD4S32G3K2SNAB	1	260pin SODIMM DDR4 3200 32GB 1.2v 2Gx8 (0-85°C)	
Storage	96FD80-N032-TR72	1 or 2	Transcend M.2 2280 32GB SATA3 SAM MLC
	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
	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)
	AMF-S8BV1F64GDM2C	1 or 2	AMF, M.2 2280 SATA SSD, 64GB, 3D TLC BiCS5 (0~70°C)
	AMF-S8BV1F128GDM2C	1 or 2	AMF, M.2 2280 SATA SSD, 128GB, 3D TLC BiCS5 (0~70°C)
	AMF-S8BV1F256GDM2C	1 or 2	AMF, M.2 2280 SATA SSD, 256GB, 3D TLC BiCS5 (0~70°C)
	AMF-S8BV2F512GDM2C	1 or 2	AMF, M.2 2280, SATA SSD, 512GB, 3D TLC BiCS5 0~70°C)
AMF-S8BV4F1TDM2C	1 or 2	AMF, M.2 2280, SATA SSD, 1TB, 3D TLC BiCS5 (0~70°C)	
AMF-S8BV4F2TDM2C	1 or 2	AMF, M.2 2280, SATA SSD, 2TB, 3D TLC BiCS5 (0~70°C)	
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	Power Cord UL 3P 7A 125V 183cm
	170203183C	1	Power Cord EU 3P 10A 250V 183cm 180°
	1700018553	1	Power Cord CCC 3P 10A 250V 183cm
	1700025113-11	1	Power Cord BSMI 3P 7A 125V 183cm
	1700018409	1	Power Cord BSI 3P 10A 250V 180cm (UK)
	1700024849-01	1	Power Cord PSE 3P 12A 125V 183cm
	170203180A	1	Power Cord SAA 3P 10A 250V 183cm (AU)
	1700008921	1	3P 1.8M PSE 7A 125V(Japan)
	1700019146	1	Power Cord CCC 3P 2.5A 250V 183cm
Thermal Pad	1990040887N000	1	CPU HS Contact Top Cover
	1990018997N100	1	CPU PAD
	1990028994N000	1	DDR4 Memory
	1990028994N000	1 or 2	M.2 Storage
	1990031603N000	1	WiFi
Operating System	20708WX1ES0026	1	Img WIN10 LTSC 2021-ELE UBX-210H V1.03 7MUI x64
	20708WX1VS0029	1	Img WIN10 LTSC 2021-VLE UBX-210H V1.03 7MUI x64
	20708WX1HS0020	1	Img WIN10 LTSC 2021-HLE UBX-210H V1.03 7MUI x64
	20708WXE1S0006	1	Img WIN11 GAC-22H2-ELE UBX-210H V1.00 7MUI x64
	20708WXV1S0006	1	Img WIN11 GAC-22H2-VLE UBX-210H V1.00 7MUI x64
	20708WXH1S0005	1	Img WIN11 GAC-22H2-HLE UBX-210H V1.00 7MUI x64
	20708U22DS0002	1	UBX-210H Ubuntu 22.04 V1.01