

TS-207

Military-grade Fanless IP65 Box PC for Transportation and Outdoor



Features

- 11th Gen. Intel® Core™ U-Series Processors
- Fanless Operating on -40 ~70°C Temperature
- Support 4 Ports Gigabit Ethernet in M12 connectors
- IP65 Enclosures for demanding AIoT Applications
- Intelligent Vehicle Power Ignition Control
- E-Mark(13) certified for In-Vehicle application
- MIL-STD-810H Shock/Vibration compliant
- Remote Management Advantech WISE-DeviceOn
- No RED certification



WISE-DeviceOn



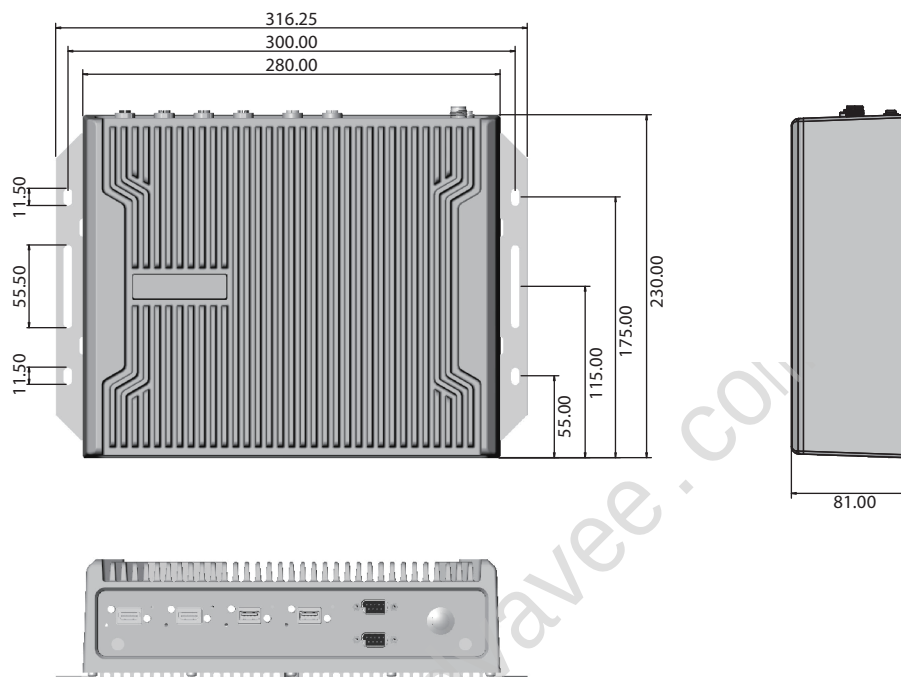
Specifications

		TS-207-V5DAA1	TS-207-V2DNA1
Processor System	CPU	Intel i5-1145GRE	Intel Celeron 6305E
	Frequency	1.5/ 4.1 GHz (Max Turbo)	1.8 GHz
	L3 Cache	8 MB	4MB
	BIOS	AMI EFI 128 Mbit	
Memory*	Technology	DDR4 Memory up to 3200MT/S	DDR4 Memory up to 3200MT/S
	Onboard memory	8GB	None
	SODIMM Memory	1x SO-DIMM socket (up to 32GB) Note: memory expansion is only supported by TPN	1 x DDR4-3200 8GB DRAM pre-installed Note: memory expansion is only supported by TPN
Graphics	Controller	Intel® Iris® Xe Graphics 1.30 GHz	Intel® Iris® Xe Graphics 1.25 GHz
	HW Acceleration	HW Encode: Supports AVC, MPEG-2, HEVC, and VP9. HW Decode: Supports Direct3D* 9 Video API (DXVA2), Direct3D12 Video API, Intel Media SDK, MFT (Media Foundation Transform) filters, Intel VA API	
	HDMI	2x HDMI 2.0b with 4Kx2K support at 48-60Hz/24bpp	
Ethernet	LAN	4x M12 circular connectors with 10/100/1000 Mbps speed (IEEE802.3af PoE options with maximum power output of 60W. Support by project)	
I/O Interface	Serial Ports	2x DB-9 RS-232/422/485 with auto flow control	
	USB Interface	2x USB type-A 3.0 & 2.0 2x M12 circular with USB 2.0 support	
Other	Watchdog timer	255-level timer interval, setup by software	
	TPM	TPM2.0	
Expansion*	mPCIe (MINIPCI-E2)	1x Full size mini PCIe slot (with PCIe Gen 1/USB 3.0, USB 2.0)	
	mPCIe/mSATA (MINIPCI-E1)	1x Full size mini PCIe slot (with PCIe Gen 1/USB 3.0, USB 2.0 & SATA)	
	M.2	1x M.2 2230 E key (with PCIe Gen 1, USB 2.0)	
Storage*	mSATA	1x mSATA (leverage mSATA/mPCIe slot)	
	SATA	1x SATA-III (mounting kits, option)	
	Onboard NVMe SSD	Up to 32GB (support by project)	
Software Support	Microsoft Windows	Windows 10	
	Linux	Ubuntu 20.04 LTS	
Power Requirement	Power Input Voltage	In-Vehicle: +12/24V _{DC}	
	Vehicle Power Ignition	Selectable boot-up & shut-down voltage, on/off delay time	
	Power Consumption	Maximum load 52.82W with used +12V _{DC} Idle mode (S0) 26.1W with used +12V _{DC}	
	Isolation	1.5 KV Isolated	
Mechanical	Construction	Aluminum housing, Black	
	Mounting	Desk/Wall-mounting	
	Dimensions (W x H x D)	280 x 81 x 230 mm (without wall-mounting) 316 x 81 x 230 mm (with wall-mounting)	
Environment	Operating Temperature	Standard: 0-60 °C Extended: -40-70 °C with air flow 0.7m/s (with extended temperature peripherals)	
	Storage Temperature	-40 ~ 85 °C (-40~185 °F)	
	Relative Humidity	95% @ 40 °C (non-condensing)	
	Sealing level	IP65 (work with option Amphenol waterproof cap and boot style hood to protect mating interfaces against water and dust incursion)	
	Vibration/Shock	IEC 60721-3-5 (Vehicle-5M3) MIL-STD-810H method 514.8 (Category 4. Trucks and trailer)	
Regulation	EMC	CE/FCC Class B	
	Safety	12V/ 24VDC: E-Mark (E13)	
	In-Vehicle Power	ISO7637-2 Lev.4	
Others	Warranty	3 years	
	Production	Made in Taiwan	

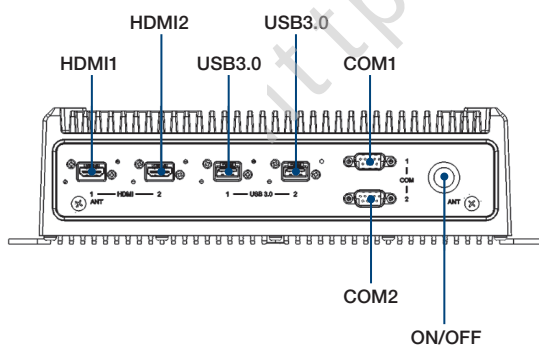
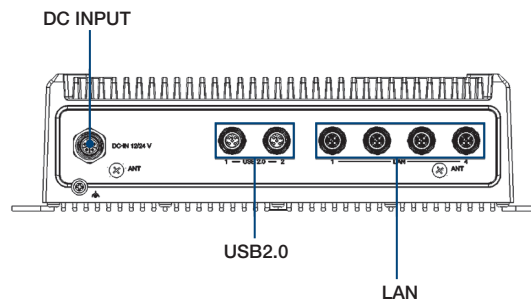
*TS-207 is a non-CTOS product. Please contact sales for any expansions.

Dimensions

Unit: mm



External I/O Mechanical Layout/Drawing

Front Panel**Rear Panel**

Ordering Information

Part Number	Intel CPU	RAM*	SSD*	Display	GbE	USB	COM	Expansion*	SIM Holder	Power Input	Operating Temperature
TS-207-V5DAA1	Intel i5-1145GRE, 4.1GHz	8GB	None	2x HDMI	4x Ethernet	2 x USB3.0/ 2.0 2 x USB2.0 (M12)	2	2x mPCIe 1x M.2 2230	0	+12/24Vdc: In-Vehicle	-40-70 °C
TS-207-V2DNA1	Intel Celeron 6305E, 1.8GHz	8GB	None	2x HDMI	4x Ethernet	2 x USB3.0/ 2.0 2 x USB2.0 (M12)	2	2x mPCIe 1x M.2 2230	0	+12/24Vdc: In-Vehicle	0-60 °C

*Please contact sales for any expansions, and memory expansion is only supported by TPN.

Packing List

Part Number	Description
-	1 x TS-207 Unit

Embedded OS

Part Number	Description
968QW21VL0	Win 10 IoTEnt 2021 LTSC MulLg ORY OEI Value PKEA (license sticker)
20706WX1VS0040	img W10 21VL TS-207 64b 21H2 ENU

Customer Support Services

Services	Description
Extended warranty	1-to-3 year extended warranty service
Conformal coating	Services for moisture, dust and corrosion resistance

Optional Items

Part Number	Description
96PSA-A120W24T2-3	Power adapter A/D 100-240V 120W 24V C14 CORD
96PSA-A150W24T2-4	Power adapter A/D 100-240V 150W 24V C14 CORD
1700033565-01	Adapter cable for power adapter (M12 to terminal block)
1700029010-01	Adapter cable for USB 2.0 (M12 to USB-A)
1700028852-01	Adapter cable for LAN (M12 to RJ45)
1652001524	Terminal block 6p 5.00mm for power adapter
1702002600	Power Cable 3-pin 180cm, USA type
1702002605-02	Power Cable 3-pin 183cm, Europe type
1700018704	Power Cable 3-pin 183cm, UK type
96PD-MUSBRAHD3241	Amphenol waterproof boot style hood for USB/HDMI connector
968AG00019	Amphenol waterproof cap for DB9/15 connector
1990023703S000	Amphenol waterproof cap for M12 male connector
1960106834N000, 1pc	SATA cable, SATA power and 2.5" HDD mounting kit 1x bracket for 2.5" HDD 1x SATA cable and cable for 2.5" HDD 10x screws
1700029224-01, 1pc	
1931000590, 2pcs	
1930000686-11, 4pcs	
19350304A0, 4pcs	