

# IV-Z318



## Intel® 11th Gen. Core™ i7 / i5 / i3 Processor Compact and Fanless In-Vehicle Embedded PC



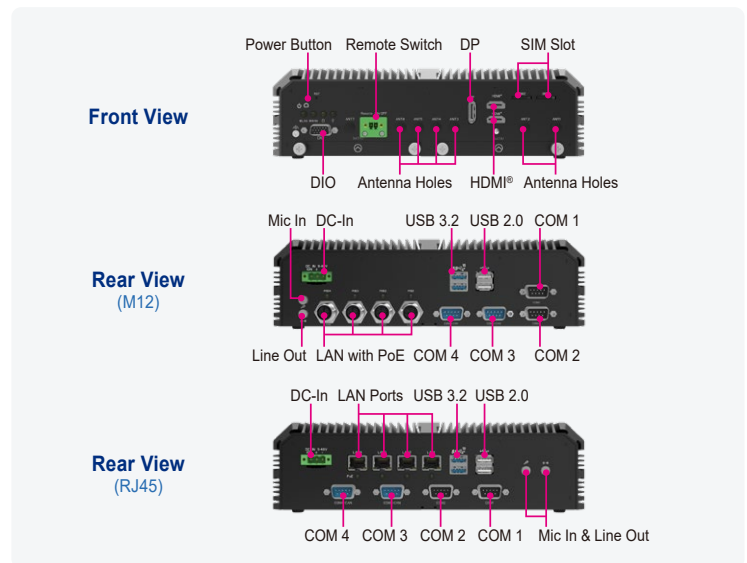
### Features

- Intel® 11th Gen. Core™ i7 / i5 / i3 processor
- Rich I/O interfaces with Isolated DIO and serial ports
- Fastest PCIe Gen4 x 4 M.2 NVMe SSD support
- Smarter Vehicle Power Ignition
- Removable HDD trays
- Secure platform with TPM 2.0 support
- Advanced Wireless solution support LTE/ 5G with Dual SIM Cards, Wi-Fi, BT, GPS Dead Reckoning (optional)
- CAN Bus 2.0B support (optional)
- Wide-ranged temperature: -40°C~70°C
- Wide-ranged voltage DC In 9~48V
- E13 & EN50155 Certified

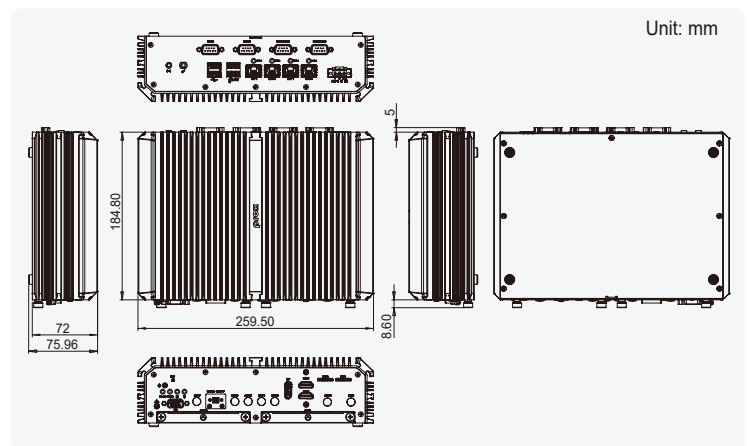
### Specifications

System	
CPU Support	Intel® Core™ i7-1185GRE (1.5W, 12M Cache, up to 2.80 GHz), WT Intel® Core™ i5-1145GRE (15W, 8M Cache, up to 2.60 GHz), WT Intel® Core™ i3-1115GRE (15W, 6M Cache, up to 3.00 GHz), WT
Memory Support	2 x DDR4-3200 SO-DIMM up to 32 GB
Graphics	Intel® Iris® Xe Graphics (for i7 and i5) Intel® UHD Graphics (for i3)
Watchdog	1~255 seconds watchdog timer selectable
Power Input	DC In 9~48V (with ignition)
Expansion Slots	1 x full-sized Mini PCIe slot 1 (USB 2.0 and SIM signal) 1 x full-sized Mini PCIe slot 2 (PCIe and USB 2.0 signal) 1 x M.2 3042/3052-D2-B slot (PCIe, USB 3.0 and USB 2.0 and SIM signal) 1 x M.2 2230-D2-E slot (PCIe and USB 2.0 signal) 1 x M.2 2280-D2-M slot (PCIe Gen4 x 4 signal)
TPM	TPM 2.0
Mounting Support	Wall-mount VESA-mount (75x75), DIN Rail (optional)
Operating System	Windows 10 LTSC 2019/2021 Windows 11 IoT Enterprise (GAC) Ubuntu 20.04 LTS
System Weight	3.2 kg
Dimensions (W x H x D)	259.5 x 72 x 184.8 mm
Certifications	FCC Class A/ CE/ UKCA/ E13/ EN50155
I/O Ports	
Drive Bay	2 x 2.5" SATA SSD (Support RAID 0/1)
USB	2 x USB 3.2 Gen 2 and 2 x USB 2.0
LAN	4 x RJ45 / M12-X-coded GbE with optional PoE (IEEE 802.3af) Support Wake-On-LAN/PXE
Serial Ports	COM 1/2 for RS-232/422/485 with 3KVrms isolation COM 3/4 for RS-232 (optional with CAN Bus)
Display	2 x HDMI® 2.0: Max. resolution 4K @ 60Hz 1 x DP1.4: Max. resolution 4K @ 60Hz
Audio	1 x Line Out, 1 x Mic In
Digital I/O	4 x in / 4 x out with 3KVrms isolation
SIM Card Sockets	2 x Nano SIM card slots
Antenna Holes	7 x Antenna holes
LED	1 x System LED, 1 x HDD LED, 1 x WWAN LED 1 x WLAN LED, 4 x PoE LED
Power On/Off	1 x Power Button 1 x Reset Button 1 x Remote Switch
Ground	1 x M3 hole
Environment	
Operating Temp. (Ambient with airflow)	-40°C~70°C (32°F~158°F)
Storage Temp.	-40°C~85°C (-4°F~185°F)
Humidity	20%~90%
Vibration (Random)	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis with SSD
Vibration (Operating)	MIL-STD-810G, 514.6C Procedure 1, Category 4
Vibration (Storage)	MIL-STD-810G, 514.6E Procedure 1, Category 24
Shock (Operating)	MIL-STD-810G, 516.6 Procedure I, trucks and semi-trailers=40G
Shock (Non-Operating)	MIL-STD-810G, 516.6 Procedure V, crash hazard shock test=100G

### System Front View & Rear View



### Dimensions



### Application

- Transportation
- In-Vehicle



\* All information contained in this document is subject to change without prior notice. Please log on [www.protech.com.tw](http://www.protech.com.tw) to acquire latest information. For detail mechanics drawing, please contact our sales.