

# SPC-7000

11th Gen Intel® Core™ i7/i5/i3 Processor (Tiger Lake) Ultra-Compact Fanless Embedded Box PC, 1 GigE LAN, 1 2.5 GigE LAN, 10G USB, 2 COM, 1 SIM Socket, 1 SSD Bracket, 9V to 55V DC, High Performance, Rugged, -40°C to 65°C Extended Temperature



## Features

- Quad-core 11th Gen Intel® Core™ i7/i5/i3 and Celeron Processor (Tiger Lake UP3), up to 28W TDP
- Compact & Fanless design, up to -40°C to 65°C operating temperature
- DDR4 3200MHz memory, up to 32GB
- Dual DisplayPort display, up to 4K resolution
- Multiple USB supports up to 10Gbps data transfer
- 1 2.5GigE LAN supports Intel® Time Sensitive Networking (TSN) for real-time data synchronization
- 1 GigE LAN supports iAMT, TPM 2.0 supported
- 9V to 55V wide range DC Power Input, Ignition Control
- SIM Socket for 5G/WiFi/4G/3G/LTE/GPRS/UMTS
- Optional supports full function SUMIT A, B expansions
- Optional VHub One-Stop Alot Solution Service supports OpenVINO



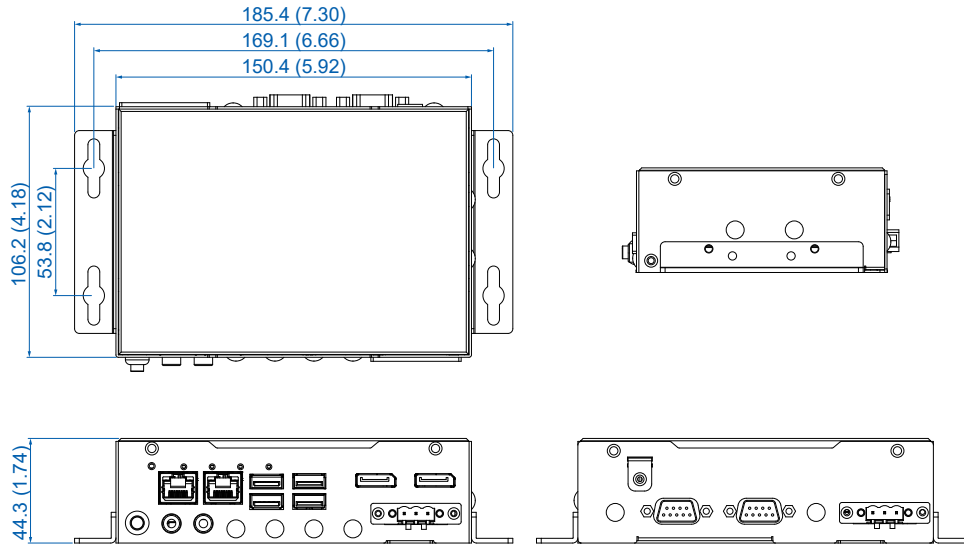
## Specifications

System	
Processor	Intel® 11th Generation Core™ i7/i5/i3/Celeron® Processor (Tiger Lake UP3)
Chipset	Intel® SoC
BIOS	AMI
SIO	IT8786E
Memory	1 DDR4 3200MHz Memory, up to 32GB
I/O Interface	
Serial	2 COM RS-232/422/485 (ESD 8kV)
USB	<ul style="list-style-type: none"> <li>▪ 2 USB 3.1 (External)</li> <li>▪ 2 USB 2.0 (External)</li> <li>▪ 2 USB 2.0 (Internal)</li> </ul>
LED	Power, HDD, WWAN, WLAN
SIM Card	1 External Nano SIM Card Socket
Expansion	
M.2	<ul style="list-style-type: none"> <li>▪ 1 M.2 Key B Socket (3042/3052)</li> <li>▪ 1 M.2 Key E Socket (2230)</li> </ul>
SUMIT A, B	2 SUMIT Slot (Optional, with customized chassis)
Graphics	
Graphics Processor	Intel® Iris® X® Graphics
Interface	Up to 2 independent displays : 2 DisplayPort : Up to 4096 x 2304 @60Hz
Storage	
SATA	1 SATA III (6Gbps)
M.2	1 M.2 Key B Socket (2260)
Storage Device	1 Internal 2.5" SSD/HDD Bracket
Audio	
Audio Codec	Realtek ALC888S-VD, 7.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out
Ethernet	
LAN 1	Intel® I219LM Gigabit LAN supports iAMT 14.0
LAN 2	Intel® I225 supports 2.5 GigE LAN

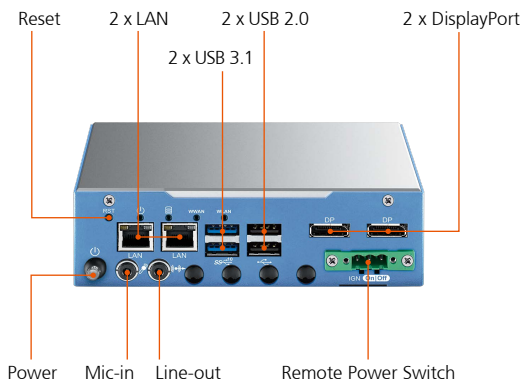
Power	
Power Input	9V to 55V, DC-in
Power Interface	3-pin Terminal Block : V+, V, Frame Ground
Ignition Control	16 Mode Software Ignition Control
Remote Switch	2-pin Terminal Block
Others	
TPM	Infineon SLB9670 supports TPM 2.0, SPI Interface
Watchdog Timer	Reset: 1 to 255 sec./min. per step
Smart Mgmt.	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
Software Support	
OS	Windows 10, Linux
Mechanical	
Dimensions (W x L x H)	150.4mm x 106.2mm x 44.2mm (5.92" x 4.18" x 1.74")
Weight	0.9 kg (1.98 lb)
Mounting	<ul style="list-style-type: none"> <li>▪ Wallmount by mounting bracket</li> <li>▪ DIN Rail Mount (Optional)</li> <li>▪ VESA Mount (Optional)</li> </ul>
Environment	
Operating Temperature	12W TDP CPU : -40°C to 65°C (-40°F to 149°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, Non-condensing
Relative Humidity	95% @65°C
Shock	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-27</li> <li>▪ SSD : 50G @wallmount, Half-sine, 11ms</li> </ul>
Vibration	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-64</li> <li>▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis</li> </ul>
EMC	CE, FCC, EN 50155, EN 50121-3-2

## Dimensions

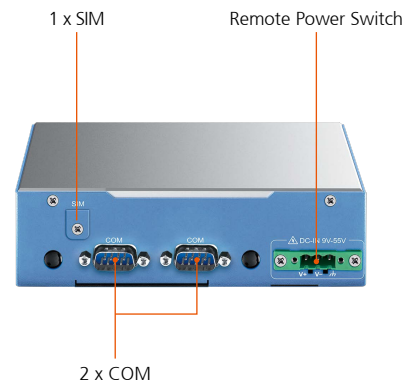
Unit : mm/ inch



## Front I/O



## Rear I/O



## Order Information

<b>SPC-7000-1185G7E</b>	SPC-7000, Intel® Core™ i7-1185G7E w/12W, 15W CPU, 1 GigE LAN, 1 2.5G LAN, 2 USB 3.1, 2 COM, 1 SIM Socket, 1 SSD Bracket, with Heat Spreader
<b>SPC-7000-1145G7E</b>	SPC-7000, Intel® Core™ i5-1145G7E w/12W, 15W CPU, 1 GigE LAN, 1 2.5G LAN, 2 USB 3.1, 2 COM, 1 SIM Socket, 1 SSD Bracket, with Heat Spreader

## Accessories

<b>DDR4 32G</b>	Certified DDR4 32GB 3200MHz RAM
<b>DDR4 16G</b>	Certified DDR4 16GB 3200MHz RAM
<b>DDR4 8G</b>	Certified DDR4 8GB 3200MHz RAM
<b>DDR4 4G</b>	Certified DDR4 4GB 3200/2666/2400 MHz RAM
<b>VESA Mount</b>	VESA Mounting Kit
<b>DIN-RAIL</b>	DIN Rail Kit
<b>PWA-120W</b>	120W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block
<b>5G Module</b>	5G Module with Antenna
<b>4G Module</b>	4G/GPS Module with Antenna
<b>WiFi &amp; Bluetooth</b>	WiFi & Bluetooth Module with Antenna

## Optional Software

<b>VHub AI Developer</b>	AI Development Kit
<b>VHub ROS</b>	AMR Development Kit
<b>VHub EtherCAT</b>	I/O Control Platform