



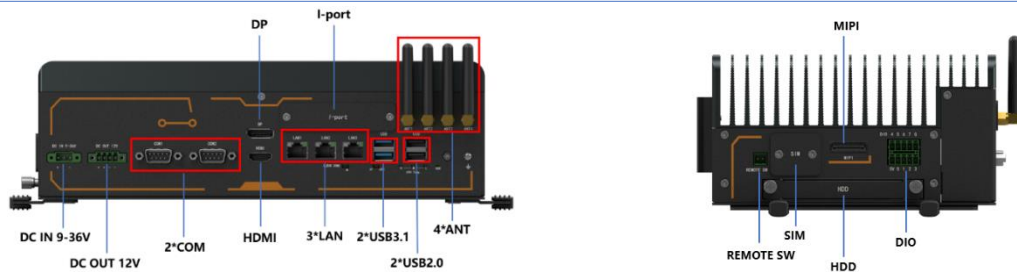
## Key Features

- Intel® Tiger lake U Soc CPU
- Aluminum-magnesium alloy, fanless passive heat dissipation design
- Intel® I225V chip, 3\*2.5G LAN
- 1\*DP+1\*HDMI for 8K+4K dual display, 1\*MIPI CSI (Opt.)
- 2\*M.2 B-Key support 4G LTE or 5G NR wireless routes
- 2\*M.2 M-key is PCIe x2 signal, supports nvme or edge AI module
- 1\*mSATA and 1\*easy pluggable 2.5 " SATA dual storage disks
- 2\*COM, 2\*USB3.2 + 3\*USB2.0, 1\*DIO
- DC9~36V wide power input, with short circuit, over voltage and over current protection
- DC 12V/2A radar power supply output

## Product Overview

BRAV-7220 is an AI MEC computing system with high energy efficiency ratio, powered by Intel® Tiger lake UP3 ULT SoC series CPU. 2.5G network port and 5G NR wireless network, support dual M.2 edge AI calculation module, no fan heat dissipation, DC 9~36V wide power input, can realize multilateral access, can be used as MEC edge computing for intelligent transportation and machine vision detection.

## IO Layout

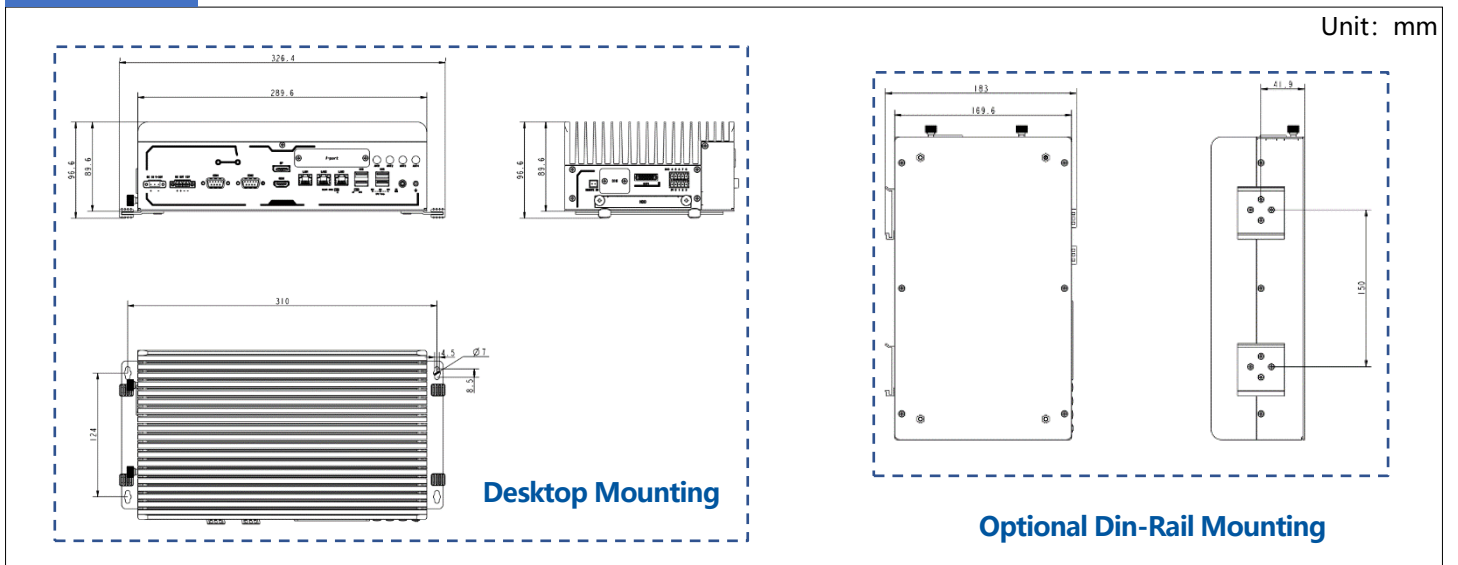


## Product SPEC

CPU	Intel® Tiger lake U Celeron/Core I3/I5/I7 CPU, ULT SoC, TDP 12W/15W/28W
Memory	2*DDR4 SO-DIMM slot, support 3200MHz, up to 64GB
Expansion	1*M.2 3042 B-key, with SIM card slot, PCIe x1 + USB2.0 signal, support 4G LTE wireless function module 1*M.2 3052 B-key, with SIM card slot, PCIe x1 + USB2.0 signal, support 4G LTE or 5G NR wireless function module 1*M.2 2280 M-Key, PCIe x2 Gen4.0 signal, support NVMe high-speed memory card or edge AI computing module 1*M.2 2280 M-Key, PCIe x2 Gen3.0 signal, support NVMe high-speed memory card or edge AI computing module
Graphics	Intel UHD or Iris® Xe Graphics, supports Intel DL boost deep learning enhancement technology, DirectX 12.1, OpenGL 4.6 and OpenCL 2.0, HDMI 2.0 max res. 4096 x 2304@60Hz, DP 1.4 max res. 7680*4320@60Hz
Audio	(NON)
LAN	3*Intel I225V chip, 10M/100M/1000M/2.5G adaptive, support iAMT 13.0, i5/i7 CPU supports vPro technology
Storage	1*2.5 " SATA Bay, easy plug design, supports the transmission speed of 6G bit/ s at most 1*mSATA full height, SATA3 signal 2*M.2 Type 2280 M-Key, PCIe x2 signal supports NVMe ultra-high speed solid state storage
DIO	8bit DIO, TTL signal, 2.5KV optical isolation input and output
I/O Interface	Front I/O: 3*2.5G LAN RJ45; 2*USB3.2(Type A); 2*USB2.0 (Type A); 1*HDMI and 1*DP; 2*RS232/422/485 DB9 male; DC-IN 3pin Phoenix socket + DC 12V out 4pin Phoenix socket; 4*SAM antenna hole position Side I/O: 1*8bit DIO (2*5Pin Phoenix terminal); 2*SIM card slot; 1*MIPI CSI 60pin high-speed port (Opt.); 1*HDD; 1*REMOTE SW Internal I/O: 1*USB2.0 (Type A); 1*SM Bus(4pin wafer)
I-port Interface	Supports built-in 1*USB2.0 lead, or M.2 function module expansion ports such as dual network ports, Can bus, and serial ports
LED	1*Power LED(on power button), 1*HDD LED, 3*CPU temp LED (Red is warning, Yellow is high, Green is normal)
Control SW	1* Power button w/LED, 2-pin phoenix term remote SW, AT/ATX SW, Clear Cmos SW
Power Supply	DC 9~36V wide power input, 3-pin 3.81mm phoenix term, with short circuit, over voltage and over current protection, Maximum output power: TBD

Watchdog Timer	Watchdog timeout programmable via software 1 to 255 second
OS Support	WIN10 / Win11 / Linux
Structure	Aluminum-magnesium alloy, SGCC frame
Color	Granite gray + Graphite black
Mounting	Desktop Mounting with shock-absorbing and anti-skid foot pad, optional Din-Rail installation
Dimension	(L*W*H): Main box: 289.6*183*89.6mm; Including mounting bracket: 326.4*183*96.6mm
Net weight	TBD
Operating temperature	-20°C ~ 70°C (Single CPU without VPU) , airflow; -20°C ~ 60°C (CPU and two VPUs operation) , airflow
Storage Temperature	-40°C~85°C
Storage Humidity	10~90%@40°C, Non-condensing
Vibration	5grms/5~500Hz/random/in working (SSD); 1grms/5~500Hz/random/in working (HDD)
Shock	50g peak acceleration(11ms duration)(SSD); 20g peak acceleration(11ms duration)(HDD)
Certification /EMC	CE/FCC Class A

## Dimension



## Ordering Info.

Model No.	CPU	Introduction
BRAV-7220-S001	Intel® Core I3-1115G4	3*2.5G LAN, 2*USB3.2, 3*USB2.0, 2*COM,1*8bit Isolated DIO, 1*HDMI, 1*DP, 1*MIPI CSI (Opt.), 1*mSATA, 2*M.2 M-Key, 2*M.2 B-Key (with SIM card slot) , 1*2.5" SATA bay, DC-IN 9~36V, DC-OUT 12V
BRAV-7220-S002	Intel® Core I5-1135G7	
BRAV-7220-S003	Intel® Core I7-1165G7	
BRAV-7220-S004	Intel® Celeron 6305E	
Gen3. Movidius™ VPU	Intel Movidius™ W047BN03, M.2 2280 M key, LPDDR4 4GB, 8TOPS(INT8)	
MLU220-M.2	Cambrian edge AI module, M.2 2280 M+B key(PCIe x2), LPDDR4 4GB, 8TOPS(INT8)	
PA-120DC19	AC / DC power adapter, DC 19V/6.32A,120W	
PA-60DC12	AC / DC power adapter, DC 12V/5A,60W	