

ABOX-5211(P) Series

10th Gen Intel® Core™ 10-Cores i9-10900TE / 8 x GbE (Optional 8 x PoE) / 2 x DP / 4 x USB 3.2 10Gbps / 4 x USB 3.2 5Gbps
9~60V Input AI Computing

Features

- 10th Gen Intel® 10-Cores i9-10900TE
- 8 x DI, and 4 x DO and 4 x RS-232/422/485
- 3 x M.2 2280 M key support NVMe SSD Storage
- Dual Hot-swappable SATA Storage RAID 0, 1
- 9-60V DC Input and Operating Temp.: -40~70°C
- 8 x GbE RJ45 (Optional 8 x PoE)



Introduction

The ABOX-5211 Series is powered by 10th Gen Intel® Core™ i9-10900TE with supporting 8 x DI, 4 x DO, and 4 x RS-232/422/485; it delivers high-performance computing and real-time capabilities for critical Industrial IoT deployment. The ABOX-5211 Series is equipped with Intel® UHD Graphics 630 Graphics, the unique design of a single-side I/O panel, and 9~60VDC power input that makes it a perfect solution for Factory Automation, Service Robots, Cellular V2X, Smart Retail, and any AIoT/Industry 4.0 applications. Also, this ABOX Fanless Box PC can be applied to industrial automation, digital signage, outdoor video surveillance, and AGV/AMR. This solution can tackle all outdoor digital applications and extreme weather conditions.

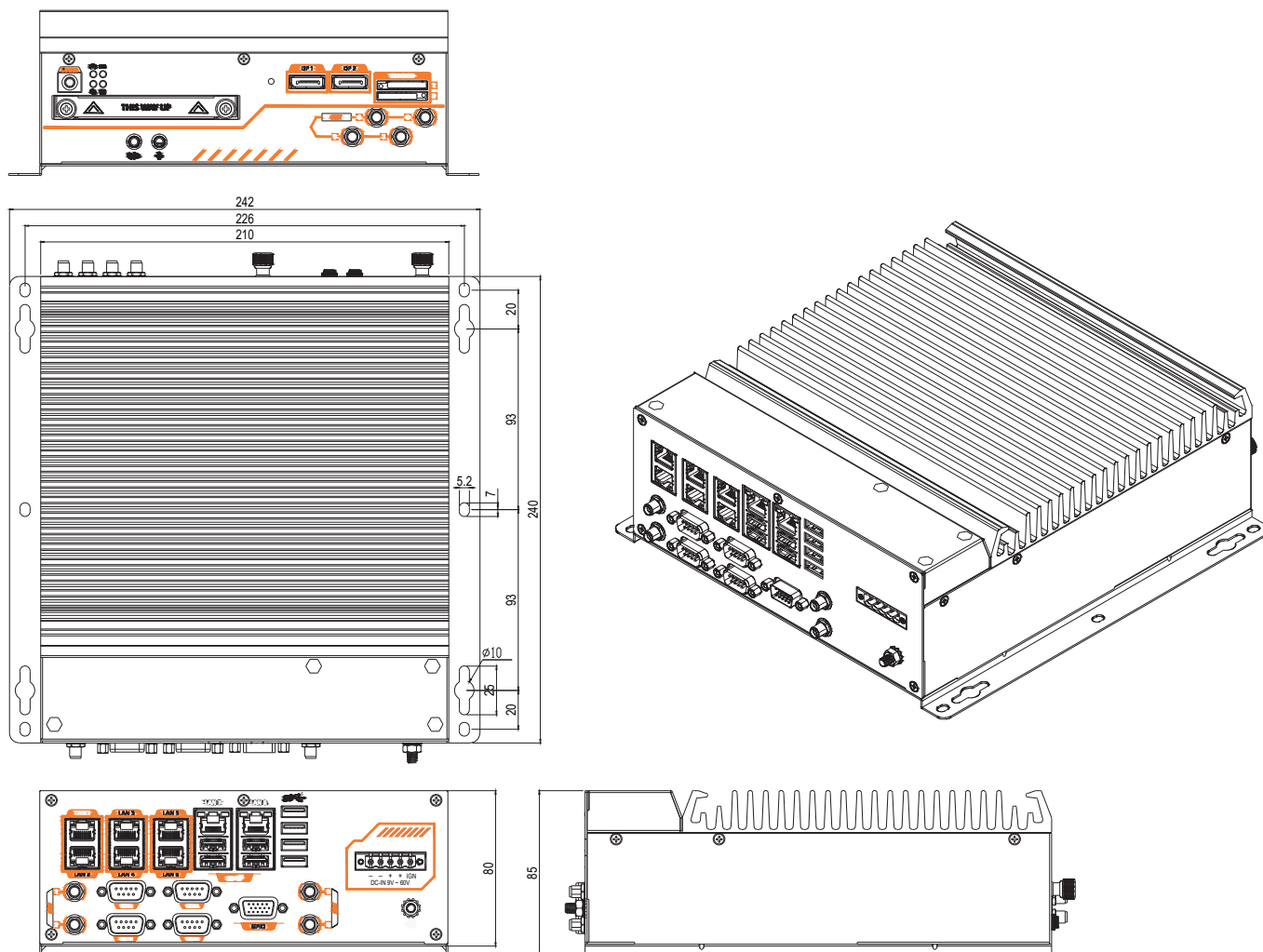
Specifications

System	
CPU	10th Gen Intel® Core™ i9-10900TE (20M Cache 2.0GHz up to 4.5GHz)
	10th Gen Intel® Core™ i7-10700TE (16M Cache 2.0GHz up to 4.4GHz)
	10th Gen Intel® Core™ i5-10500TE (12M Cache 2.3GHz up to 3.7GHz)
	10th Gen Intel® Core™ i3-10100TE (6M Cache 2.3GHz up to 3.6GHz)
	Intel® Celeron® G5900TE (2M Cache 3.0GHz)
Chipset	Q470E
Memory	2 x DDR4 3200MHz SO-DIMM up to 64GB
LAN Chipset	7 x Intel i210-AT and 1 x i219LM (support iAMT) Gb/s Ethernet Controllers Onboard Support PXE and WOL
Watchdog	1 ~ 255 Level Reset
TPM	2.0
I/O	
Serial Port	4 x RS 232/422/485
USB Port	4 x USB 3.2 10Gbps and 4 x USB 3.2 5Gbps
LAN	8 x RJ45 Ports for GbE (Optional 8 x PoE Total Max.120W)
Video Port	2 x DP
DIO Port	8 x DI (5~60VDC) and 4 x DO (5VDC, 100mA)
Audio	1 x Line-out and 1 x Mic-in
Expansion Bus	1 x M.2 B Key 3042/3052 for WWAN (USB3.0) w/ Dual SIM Slot
	1x M.2 A-E Key 2230 Slot for Wi-Fi (PCIe + USB)
	2 x Full Mini-PCIe Slots (Support DIP Switch Enabled/Disabled SMBus Interface)
Mechanical	
Construction	Aluminum Extrusion with Steel Chassis
Mounting	Wall-mount
Weight	3680g (Barebone)
Dimensions	240(L) x 242(W) x 85(H)mm with Wall-mount

Storage	
Type	1 x 2.5" Drive Bay for SATA Type HDD/SSD (Rear Panel) 3 x M.2 M Key 2280 PCIe 4x Supported * Thermal heatsink is required for M.2 storage. Please contact sales window for more information.
Graphics	
CPU Built-in Graphics	Intel® UHD Graphics 630 for i9/i7/i5/i3 Intel® UHD Graphics 610 for G5900TE Max Resolution (DP 1.2) : 4096 x 2340 @ 60Hz
Software	
Operating System	Windows 10 64bit, Ubuntu 20.04 64bit
Environmental	
Operating Temp.	-40°C ~ 70°C w/0.6 m/s airflow *Operating temp. varies by accessories installed.
Storage Temp.	-40°C ~ 80°C
Relative Humidity	10% RH – 90% RH (non-condensing)
Vibration (with SSD)	IEC60068-2-64, Random, 2.5G@5~500Hz, 1hr/axis MIL-STD-810G, Method 514.6, Procedure I, Cat.4, Operating
Shock	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
Certifications	CE, FCC Class A, E13
Power Requirement	
Power Input	9~60VDC Power Input
Power Protection	Automatics Recovery Short Circuit Protection
Power Mgmt.	Vehicle Power Ignition for Variety Vehicle
Power Off Control	Power off Delay Time Setting by BIOS and Software
Battery Backup (Optional)	Internal Battery Kit for 10 Mins Operating (P/N: BAT-5200 kit, Operating Temp. -20 ~ 60°C) *UPS backup time varies depending on actual overall system power consumption. Patent No. : M447854 - Build-in Battery

Dimensions

Unit : mm



Ordering Information

Model Number	ABOX-5211x-yy (x= P= w/PoE, x= Empty= w/o PoE, yy= i9= i9-10900TE, yy= i7= i7-10700TE, yy= i5= i5-10500TE, yy= i3= i3-10100TE, yy= C1= G5900TE)
Description	10th Gen Intel® 10 Cores i9-10900TE / 8 x GbE (Optional 8 x PoE) / 2 x DP / 4 x USB 3.2 10Gbps / 4 x USB 3.2 5Gbps / 9-60V Input AI Computing
State of Origin	Made in Taiwan

Optional Accessories

DRAM	DDR4-3200 MHz SO-DIMM, 4GB~32GB, -40~85°C
SSD	M.2 2280 B-M key NVMe TLC -40~85°C 64GB~1TB w/ Heatsink M.2 2280 B-M key SATA TLC -40~85°C 64GB~1TB w/ Heatsink 2.5 inch SATA TLC -40~85°C 64GB~2TB
Wi-Fi	M.2 2230 A-E key 802.11 a/b/g/n/ac, Wi-Fi 6E
Modem	M.2 3042 B key 5G & LTE Module
GPS	MiniPCIe GPS Module
CANBUS	MiniPCIe CANBUS Module
Battery Backup Kit	BAT-5200 Battery Kit, 5200mAh, Charge 0~45°C, Discharge -20~60°C
Power adapter	AC/DC 24V Power Adapter

All specifications are subject to change without notice.