

VBOX-3630(P)

PATENT No.
M447854
BUILT-IN BATTERY

PATENT No.
M448001
THERMAL COOLING

Intel® 11th Gen Core™ i7-1185G7E CPU with 4 x LAN On-Board In-Vehicle Computer

Features

- Intel® 11th Gen Core™ i7-1185G7E
- 3 x M.2, 2 x mPCIe Slots for Wi-Fi / Dual WWAN / GPS / CAN Expansion
- 1 x 2.5GbE + 3 x GbE LAN Ports (M12 X-coded Connector for Option)
- Supports 4 Independent Display Outputs: 2 x HDMI, 1 x DP, 1 x DVI-D
- Wide Range Input 9V - 60VDC with Ignition Control for EV Installations
- Supports Optional Battery Backup Kit
- E-mark & EN50155 Certified



intel
11th Gen
CORE

9-60V
POWER
INPUT

4
Display

5G

E-mark
EN50155

Introduction

VBOX-3630 is a fanless in-vehicle computer with 5G connectivity. It utilizes Intel® 11th Gen Core™ i7-1185G7E CPU up to 4.4GHz. VBOX-3630 features an ultra-compact design measuring 250 x 165 x 55mm, which can easily fit into restricted spaces. The system can select 5G, LTE, GPS, and Wi-Fi / Bluetooth as robust connectivity by M.2 modules. It is a building-in four independent display output, audio line-out, and microphone-in. It is the perfect solution for fleet management, in-vehicle digital signage, and mobile DVR. Furthermore, it features Smarter Vehicle Power Ignition and wireless remote control in various vehicles. VBOX-3630 can effectively support cars in extreme weather and operating conditions, such as snowplows, trucks, buses, taxis, and forklifts.

Specifications

System	
CPU	Intel® 11th Gen Core™ i7-1185G7E 1.8GHz up to 4.4 GHz Intel® 11th Gen Core™ i5-1145G7E 1.5GHz up to 4.1 GHz Intel® 11th Gen Core™ i3-1115G4E 2.2GHz up to 3.9 GHz Intel® Celeron® 6305E up to 1.8GHz
Memory	2 x DDR4-3200 SO-DIMM Up to 64 GB
LAN	1 x Intel® 2.5GbE 3 x Intel® Gigabit Ethernet
Watchdog	Watchdog Timer Support, Offer 1 – 255 Step
TPM Version	2.0
I/O	
USB	2 x USB 3.2 Gen 2 (10 Gbps) 2 x USB 2.0
LAN	4 x RJ-45 or 4 x M12 X-coded (1 x 2.5GbE, 3 x GbE) (Optional PoE w/ Max. 60W Power Budget)
DIO	6 x DI (5~60V) and 4 x DO (5V/100mA) 2 x DC Output (12V/1A)
Audio	1 x LINE-Out and 1 x MIC-In (1 x LINE-In for Option)
Video	2 x HDMI, 1 x DP, 1 x DVI-D* (Supports 4 Independent Display) *Single-Link cable only
Expansion Bus	2 x mPCIe *One is shared with M.2 Key B 1 x M.2 2230 Key E, 2 x M.2 3042/52 Key B
Antenna	10 x Pre-cut Holes for External SMA Antenna
SIM Card Socket	2 x SIM Card Sockets Supported Onboard with Eject
Serial Port	4 x RS-232/422/485 (Auto Direction Control) (3 Ports for M12 Model)
Storage	
Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD Support RAID 0, 1 1 x M.2 2280 Key M for NVMe SSD
Software	
Operating System	Windows 10 IoT LTSC (64-bit), Windows 11 IoT (64-bit) Linux Ubuntu 20.04.6 LTS (64-bit), 22.04 LTS (64-bit)

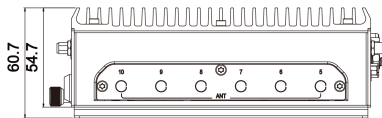
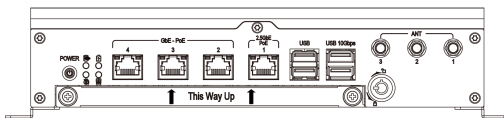
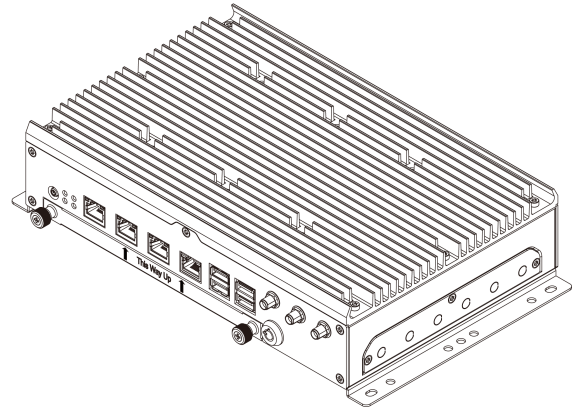
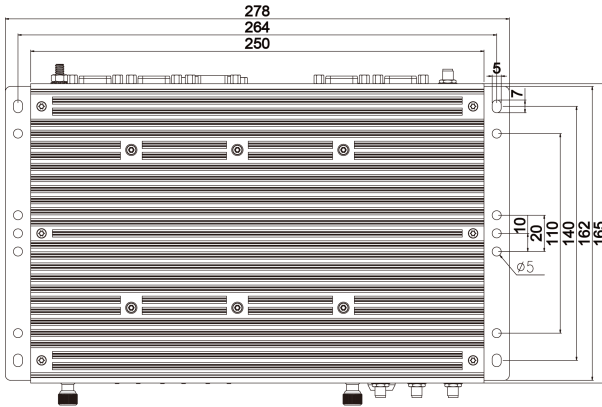
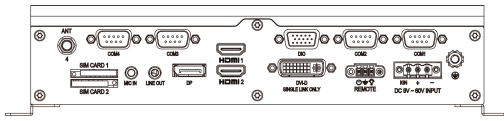
Graphics	
Graphics	Intel® Iris® Xe Graphics / Intel® UHD Graphics
Resolution	Max Resolution (HDMI2.0b) : 4096 x 2304@60Hz Max Resolution (DP) : 4096 x 2304@60Hz
Environmental	
Operating Temp.	-40 ~ 70°C, ambient w/ 0.6m/s airflow Patent No. M448011-Thermal Cooling
Storage Temp.	-40 ~ 85°C
Relative Humidity	10% ~ 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 514.6, Procedure I, Trucks and semi-trailers 15G (11ms with SSD)
Certifications	CE, FCC Class A, E-mark, EN50155, EN45545-2 (R25)
Power Requirement	
Power Input	9 ~ 60 VDC Input *24 ~ 60 VDC Input for VBOX-3630P-M12X
Power Protection	Automatics Recovery Short Circuit Protection
Power Mgmt.	Power Ignition for Vehicles
Power Off Control	Power Off Delay Time Setting by Software
UPS	Optional Battery Kit for 10 Mins Operating (Operating Temp. 0~60°C) *UPS backup time varies depending on actual overall system power consumption. Patent No. : M447854 - Build-in Battery
Mechanical	
Construction	Aluminum Alloy
Mounting	Wall-mount
Weight	2,500g (Barebone)
Dimensions	250(L) x 165(W) x 55(H) mm

All specifications are subject to change without notice.

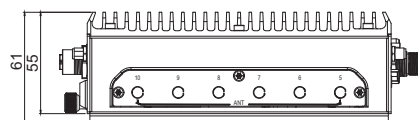
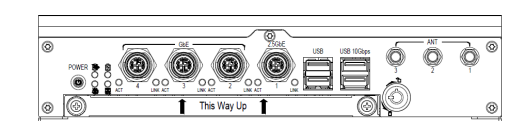
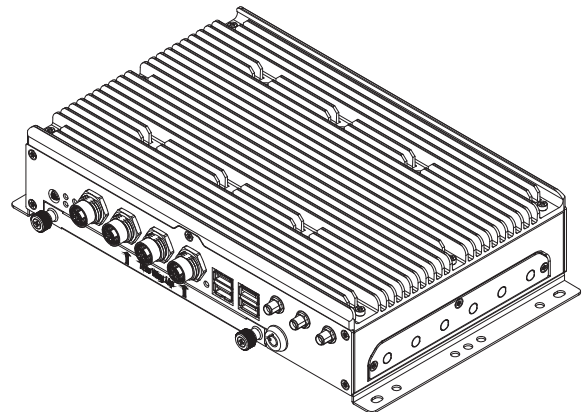
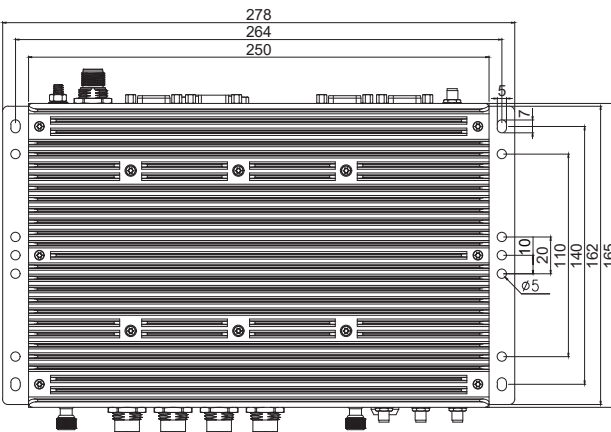
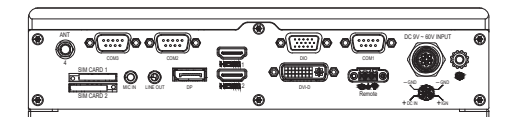
Dimensions

Unit : mm

VBOX-3630(P)



VBOX-3630-M12X



Ordering Information

Part Number	VBOX-3630x-yyyy-zz (x=P=w/PoE, yyyy= M12X=M12 X-code for LAN ports, zz=i7=i7-1185G7E, zz=i5=i5-1145G7E, zz=i3=i3-1115G4E, zz=C1=6305E)
Description	11th Gen Intel® Core™ Processor i7-1185G7E CPU with 4 x GbE LAN On-Board Computer
State of Origin	Made in Taiwan

Optional Accessories

DRAM	DDR4 SO-DIMM 3200 8GB~32GB (-40~85°C)
SSD	2.5 inch SATA SSD TLC 64GB~1TB (-40~85°C) M.2 2280 NVMe 256GB~1TB TLC (-40~85°C)
Wi-Fi Module	M.2 2230 Wi-Fi 6 + Bluetooth 5.2 Module
WWAN Modem	M.2 3042/52 5G/LTE Modem
GPS	mPCIe GPS Module
CAN Bus	mPCIe CAN Bus Module
Battery Backup Kit	BAT-3630 Kit, 2,350mAh 3S1P Battery Kit (0~60°C)

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