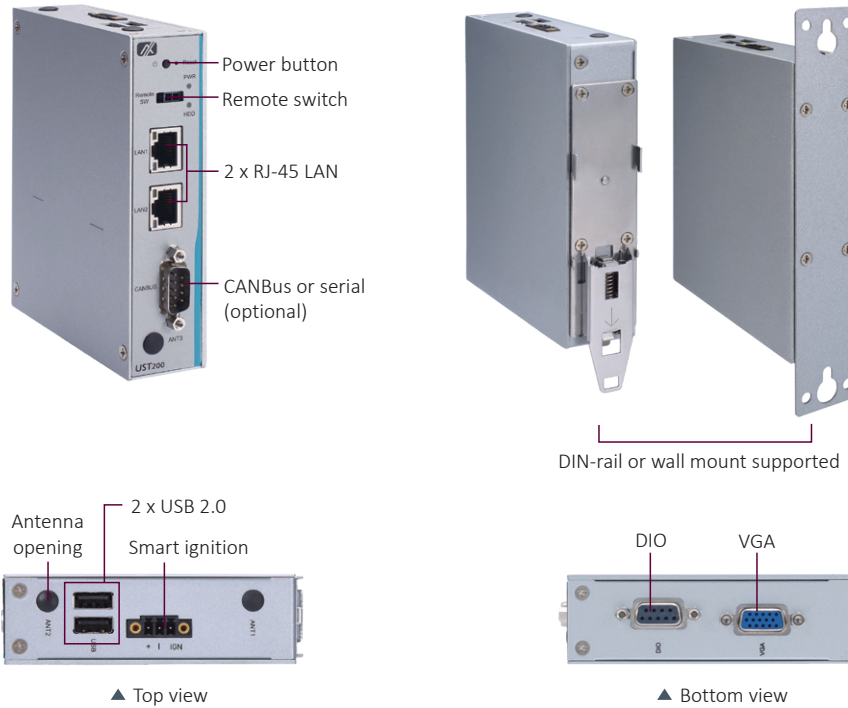


# UST200-83H-FL

Robust and Compact DIN-rail Fanless Embedded System with Intel Atom® x5-E3930 Processor for In-Vehicle Gateway Applications



## Features

- CE, FCC and E-mark certified
- Intel Atom® x5-E3930 processor (Apollo Lake-I)
- Extreme cost-effective with fanless and cableless design
- Wide operating temperature range from -40°C to +70°C
- Supports typical 12 and 24V DC in-vehicle power input
- Smart ignition for power on/off schedule, vehicle battery protection and different power mode
- Supports COM, CAN, USB, and GbE LAN

## Specifications

Standard Color	Sliver
Construction	Extruded aluminum and heavy-duty steel, IP20
CPU	Intel Atom® x5-E3930 2C @ 1.3 GHz, TDP: 6.5W
Chipset	SoC integrated
System Memory	1 x DDR3L-1600 SO-DIMM, up to 8GB
BIOS	AMI
TPM	TPM 2.0

## Specifications

System I/O Outlet	Serial	1 x DB9 Serial console or RS-232/422/485*
	CANBus	1 x DB9 CANBus 2.0 A/B*
	Display	1 x VGA (up to 1920 x 1200 @ 60Hz) (HDMI optional)
	Ethernet	2 x RJ-45 10/100/1000 Mbps Ethernet (Intel® I210-AT)
	USB	2 x USB 2.0
	DIO	1 x DB9 8-bit programmable DIO
	Others	3 x antenna opening 1 x power button 1 x remote switch
Extension Interface	1 x full-size Rev. 1.2 PCI Express Mini Card slot: USB/PCIe with SIM socket	
	1 x half-size Rev. 1.2 PCI Express Mini Card slot: mSATA/USB/PCIe	
Storage	mSATA	1 x half-size mSATA (occupying 1 x PCI Express Mini Card slot)
Watchdog Timer	255 levels, 1 to 255 sec.	
Power	Power Supply	Vehicle: 1 x terminal block, 12 and 24V DC with smart ignition**
System Indicator	1 x LED indicator for SATA drive activity	
	1 x LED indicator for power	
Operating Temperature	-40°C to +70°C (-40°F to +158°F) with W.T. peripheral***	
Relative Humidity	0% to 95% relative humidity, non-condensing	
Dimensions (W x D x H)	31 x 100.4 x 125 mm (1.22" x 3.93" x 4.92")	
Mounting	Wall mount, DIN-rail	
Weight (net/gross)	0.3 kg (0.67 lb)/0.45 kg (0.99 lb)	
Certifications	CE (Class A), FCC (Class A), E-Mark (E24) certified	
EMC	CE/FCC	EN 55032 (Class A), EN 55024, and FCC part 15 B (Class A)
	E-Mark	ECE-R10
Vibration Endurance	3 Grms with mSATA (5 to 500Hz, X/Y/Z direction; random, operating)	
	MIL-STD-810G, Method 514.6C-VI Category 4 compliant	
EOS Support	Windows® 10 64-bit, Linux	



\* Please refer to the ordering information section.

\*\* UST200 also supports 9 to 36VDC for general purpose. Please refer to the user manual for configuration settings.

\*\*\* Wide temperature. All W.T. supported products have to be sorted by Axiomtek.

## Ordering Information

### Standard

UST200-83H-FL-E3930-CAN-TVDC (P/N: E274200100)	Fanless embedded system with Intel Atom® x5-E3930 processor, 1 CAN, 2 LAN, 2 USB and 1 DIO, operating temperature range of -40°C to +70°C, TPM 2.0 support, and smart ignition	
UST200-83H-FL-E3930-COM-TVDC (P/N: E274200102)	Fanless embedded system with Intel Atom® x5-E3930 processor, 1 COM, 2 LAN, 2 USB and 1 DIO, operating temperature range of -40°C to +70°C, TPM 2.0 support, and smart ignition	

\*TDC: terminal block DC-in connector, DC voltage input

### Optional

Communication Modules	E29R318103	ACC318-501-201 (LTE NL668-EAU)
AC to DC Adapter	E29R318108	ACC318-541-30F (LTE NL668-EAU with GPS antennas)
Cable/Power Cord	509000001500	PWS FSP120-AAAN3 (9NA1206647) FSP 120W
	599000001100	Power cord YP12/YC12_CY-U0032 YUNG_LI 1830 mm
	59906000010E	Power cord YP-12/YC-12 (Japan)
	59903000000E	Power cord YP-22/YC-12 (Europe)
	59905000000E	Power cord YP-35/YC-12 (Australia)
	59904010000E	Power cord/UK YP-61A/YC-12 L=1830 mm

\* Specifications and certifications may vary based on different requirements.

## Packing List

- 1 x screw pack
- 1 x wall-mount bracket
- 1 x DIN-rail kit
- 1 x power terminal block connector
- 1 x thermal pad for memory module

## Power Protection

OCP (over current protection)

OVP (over voltage protection)

UVP (under voltage protection)

RPP (reverse polarity protection)

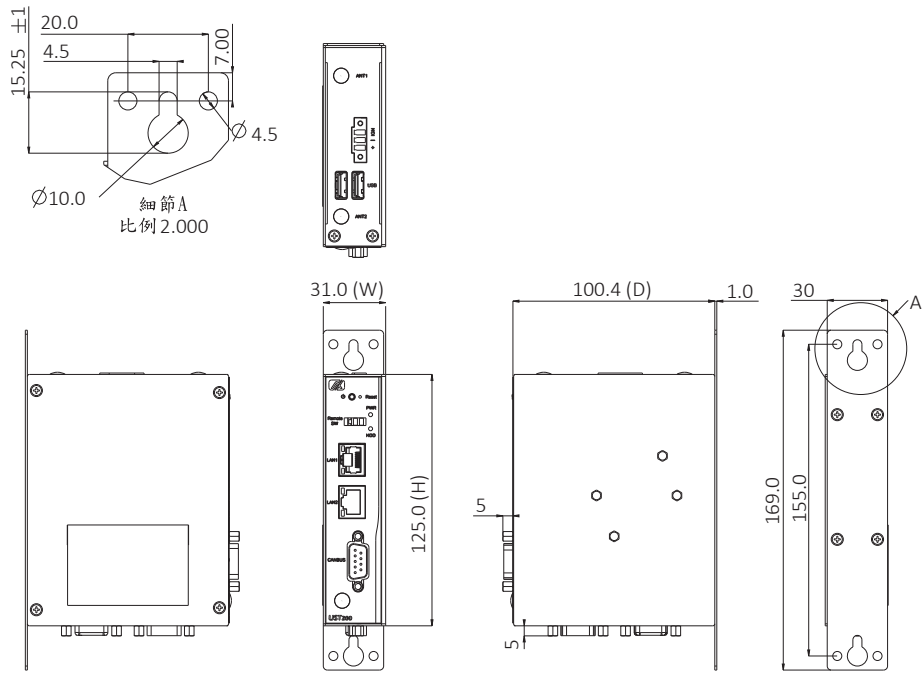
ISO 7637-2 pulse 1, 2a, 2b, 3a, 3b, and 4 (vehicle version)

Setting for in-vehicle battery protection: system will be automatically turned down at low voltage level.

Setting for ignition control: system will activate a counter at low battery voltage, with IGN ON and IGN OFF delay.



## Dimensions



E274200100

▲ Wall Mount

▲ Din-Rail Mount