

R6S Series

Fanless Rolling Stock Computer with Intel® Core™ i7-7600U Processor



Images are for reference only. See ordering information for SKU details.

■ Features

- Intel® Core™ i7-7600U Processor
- Certified with EN 50155 and EN 45545 standard
- Mobile NVR with 10x rugged M12 PoE ports
- SKU A: 2x full size mini PCIe-mini with dual SIM slot (total: 4x SIM), SKU B/C: 4x M.2 (3042, 42x30x2.3mm) Socket with SIM on each for LTE, 1 x mini PCIe for Wi-Fi
- Wide range operating temperature from -40 to 70°C

■ Preliminary Specifications

Processor System

CPU	Core™ i7-7600U
Frequency	Up to 2.8 GHz
Core Number	Dual-core
BIOS	AMI SPI Flash BIOS
Chipset	SoC
Processor Graphics	Intel integrated HD Graphics 620
	Yes

Memory

	DDR4 2400 MHz SO-DIMM Socket x1
Max. Capacity	Up to 16GB (Factory default: 16GB pre-installed)

Ethernet

	Intel i210IT x4
Speed	10/100/1000 Mbps
Interface	RJ45 (LAN) x1, M12 X-coded (PoE) x10
PoE	IEEE 802.3af (R6SA max 120W, R6SB max 80W, R6SC max 150W)

Storage

	SATA
Installation	Removable 2.5" drive bay x1 for 2x storages (HDD/SSD is not included)
Type	mSATA, SDxC
Installation	mSATA (Factory default: 128GB pre-installed), SDxC x1

I/O

	SKU A: VGA x 1, resolution up to 2048 x 1536, DVI-D x 1, resolution up to 1920 x 1200
LAN	GbE RJ45 x1
Audio	Mic-in and Line-out with 2-watt by HD Audio
Serial I/O	SKU A: 2 x RS232(default)/422/485 x 2 with RI/5V by DB9 (male), SKU B/C: 4 x RS-232/422/485
GPS	u-blox NEO-M8N; 3 GNSS (GPS, Galileo, GLONASS, BeiDou), default @ GPS + GLONASS dual band
G-sensor	ADXL 345
CAN	Optional CAN Bus J1939/J1708 x1
MIO	7x DI 12V TTL selectable, 7x DO 24V TTL, Max. 100mA 2x IGN-DI of ignition control to MCU

Antenna SMA antenna hole x6 (includes GPS+GLONASS x1)

USB

Cooling

Processor

Front: USB 2.0 Type A x2, USB 3.0 Type A x 2

Rear: SKU A: 1 x USB2.0 type A with 900mA, SKU B/C:

N/A

Expansion

Mini-PCIe / M.2

R6SA: 2 x full size mini PCIe with dual SIM slot (total: 4xSIM);

System

Fanless design with corrugated aluminum

Environment

Operating	-40~70°C / -40~158°F
Storage Temperature	-40~85°C / -40~185°F
Relative Humidity	5%~95% @ 40°C / 104°F (Storage Level)

Miscellaneous

	Yes
Internal RTC with Li Battery	Dimension (W x H x D) Yes

Mechanical

Weight	20.8 kg (with power brick)
Mounting	Wall mount kit

Power

Connecto	M12 K-coded (Ground, DC_IN, Ground, IGN, Chassis Ground)
Input	SKU A: Input Rated: 32-96Vdc; SKU B: Input Rated: 24-36Vdc
Output	SKU A: Power source output from system @ DC + 12V/ 2A by M12 A-coded (5 pins, +, -, car speed pin & direction pin from NEO-M8L GPS, male) x1, SKU B/C:

Driver Support

Linux	Win 10 IoT Linux: Redhat Enterprise 5, Fedora 14. Linux Kernel 2.6.18 or later
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Certification

	CE Class A, FCC Class A, RoHS
Safety	E13 include ISO 7637-2
Certified	MIL-STD-810G, EN 50155, EN 45545, EN 50121
Compliance	IP-50 Compliant

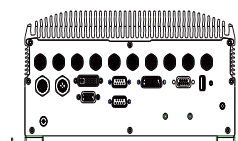
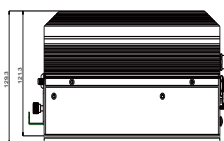
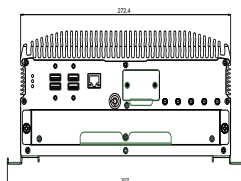
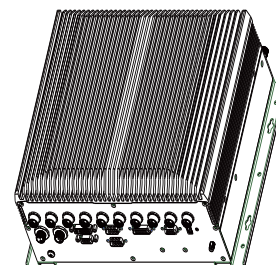
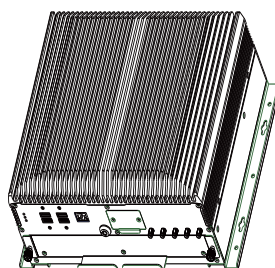
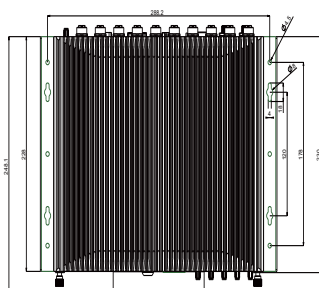
Product I/O View



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|------------------------------|--------------------|--------------------|
| A Wall mount kit | D DC Input | G COM x 2 |
| B Swappable Drive Bay | E DC output | H DVI / VGA |
| C Antenna Hole | F PoE x 10 | |

Dimensions R6S: 272.4 x 121.3 x 230 mm

IR-RPB6SA1A / IR-RPB6SB1A / IR-RPB6SB1B: 143.8 x 53.4 x 230



Ordering Information

R6SA	Intel Core i7-7600U Processor, 2x miniPCIe socket with dual SIM, DC 32~96V power input
R6SB	Intel Core i7-7600U Processor, 1x miniPCIe socket, 4x M.2 with single SIM each, DC 24~36V power input
R6SC	Intel Core i7-7600U Processor, 1x miniPCIe socket, 4x M.2 with single SIM each, DC 72~110V power input