

ROCK-101

Arm Based IP67 AI Box for Rugged Applications



Features

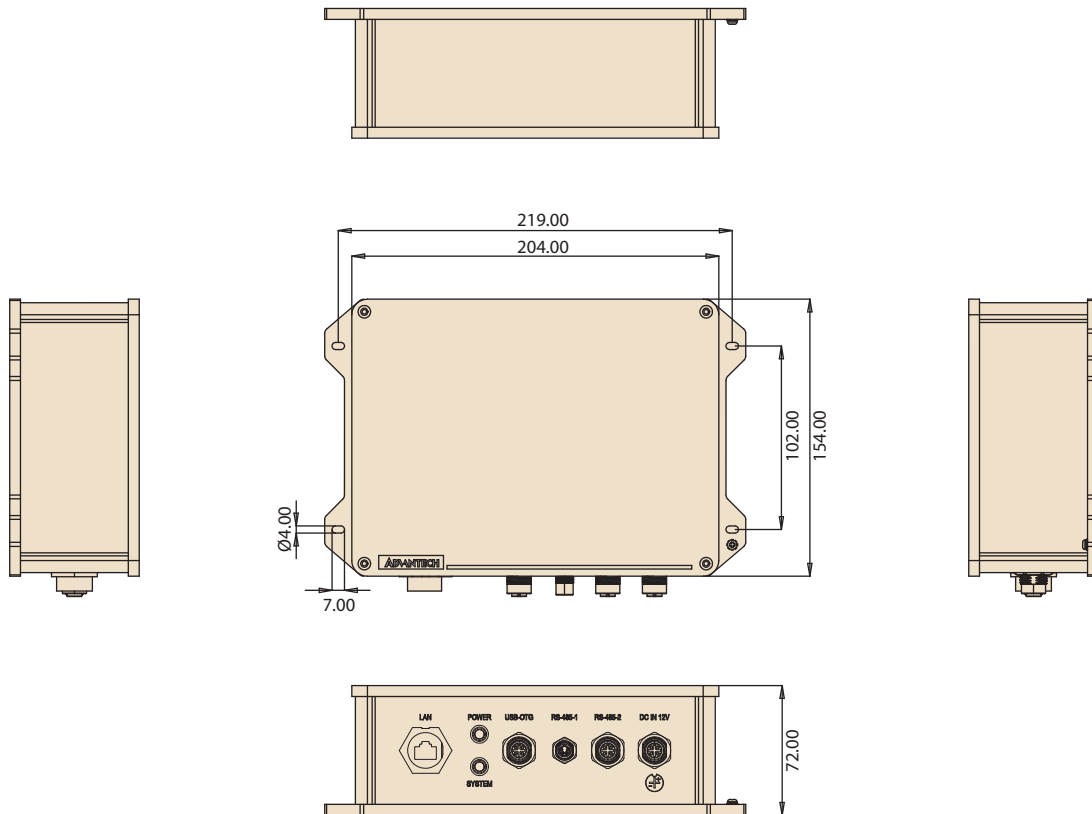
- Rockchip RK3568J Arm Quad Cortex-A55, up to 1.6 GHz
- Fanless Operating Temperature -40 ~70°C
- IP67 Enclosures for Water/Dust-proof
- Onboard 4GB LPDDR4 and 32GB eMMC
- 1 M.2 and 1 mini PCIe for WIFI & LTE expansion

Specifications

Processor	CPU	Rockchip RK3568J Arm Quad Cortex-A55, up to 1.6 GHz
	NPU	UP to 1 TOPS
Memory	Technology	LPDDR4 1333MHz
	Capacity	On-board LPDDR4 4GB
	Flash	32GB of eMMC NAND flash for OS and Advantech's boot loader
Watchdog Timer	Watchdog	1~6553s, default 60s, power on/off 1s by MCU
I/O Interface (external)	Ethernet	1x Waterproof RJ45 Speed:10/100/1000 Mbps
	Serial	1x M8 A Code RS-485 with 12V power 1x M12 A Code RS-485 with 12V power, 0.5A
	USB	1x M12 USB3.0/USB OTG
	LED	2x LED POWER (Green),SYSTEM(Green)
I/O Interface (internal)	SIM	1x Nano-SIM reader
	Mini PCIe	1 x Mini PCIe slot, w/USB 2.0 and 1 x PCIe 3.0
	M.2	1 x M.2 2230 Key E slot, w/SIO*UART*PCIe 3.0 x, and 1 x USB 2.0
	SD Socket	1 x Micro SD slot
Software	Linux	Linux Debian 10
Power	Input voltage	1x M12 A Code Nominal inputs 12V
	Consumption	TBD
Environment	IP Class (Solid Particle)	IP class 6X (operating with protected mating interfaces against water and dust incursion)
	IP Class (Water)	IP class X7 (operating with protected mating interfaces against water and dust incursion)
	Operating Temperature	-40-70 °C/ -40~158°F (with extended temperature peripherals)
	Storage Humidity	40°C, 95% relative humidity, non-condensing
Certifications		IEC CE/FCC class B /CCC
Mechanical	Enclosure	Fanless system
	Construction	Aluminum housing, Black
	Mounting	Wall Mount
	Dimensions (W x H x D)	204 x 154 x 72 mm
Other	Weight	TBD

Dimensions

Unit: mm



External I/O Mechanical Layout/Drawing



Ordering Information

PN	CPU	Memory	Flash	SD	LAN	USB	Serial Port	4G Module	WIFI6 Module	Operating Temperature
ROCK-101-V101AA1	RK3568J	4GB	32GB	1	1	1	2	0	0	-40 ~70°C

Packing List

Description	QTY
ROCK-101	1
1700036511-01	1
1700029009-01	1

Optional Items

Part Number	Description
96PSA-A36W12W7-5	ADP A/D 100-240V 36W 12V C6 LOCK DC JACK 62368
968AD00479	4G LTE CAT4+GNSS Mini PCIe Full size CN
AIW-162BS-G11	Industrial grade Wi-Fi 6 M.2 solution