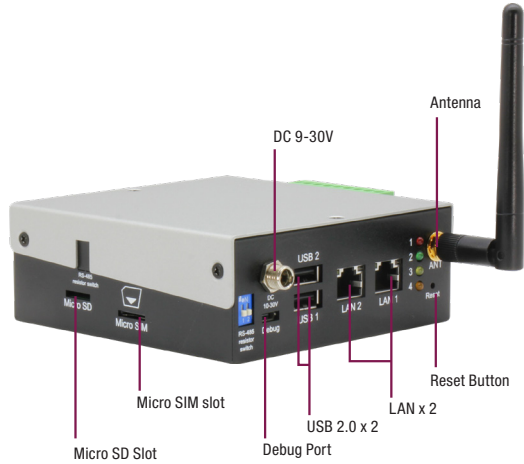


# SRG-ADIO

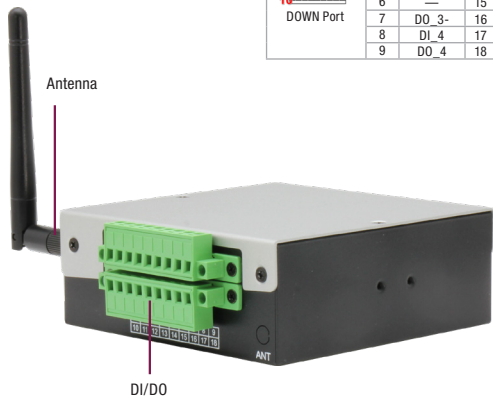
Standard IoT Gateway System With ADC and Digital I/O Function

IoT Gateway & Protocol Expansion

Front View

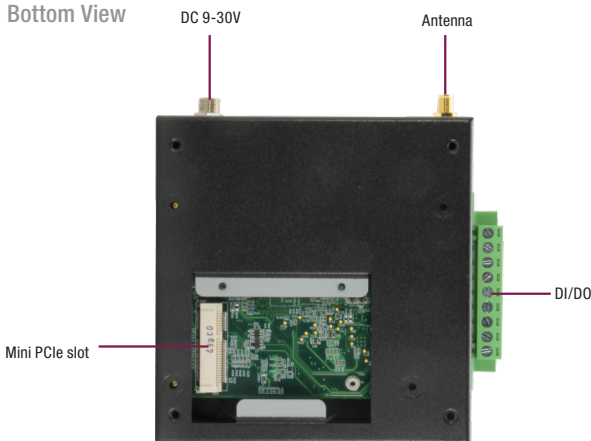


Rear View



Pinout	PIN	UP Port Definition	PIN	DOWN Port Definition
UP Port	1	DO_VCC+	10	AI_GND
	2	DO_1	11	AI_4
	3	DO_VCC-	12	DI_3
DOWN Port	4	—	13	AI_3
	5	DO_2	14	DI_2
	6	—	15	AI_2
	7	DO_3-	16	DI_1
	8	DI_4	17	AI_1
	9	DO_4	18	DI_Common

Bottom View



## Features

- ARM Cortex-A8 800 MHz RISC Processor
- Onboard DDR3L 1 GB / eMMC 8GB
- USB 2.0 x 2, Gigabit Ethernet port x 2, Programmable LED x 4
- 4 Channel Isolated Digital Input
- 4 Channel Isolated Digital Output
- 2 Channel Analog Input
- RTC x 1, Micro SD Slot x 1, SIM Slot x 1
- Mini PCIe connector x 1 (For RF Module)
- NB-IoT connector x 1
- Debug Port x 1
- DC9-30V Power Input
- Onboard WiFi/Bluetooth Module
- Pre-Install Linux Debian
- Supports Modbus/MQTT Library(by request)



## Specifications

System	
Processor	ARM Cortex-A8 800 MHz RISC Processor
Memory	Onboard DDR3L 1GB
Storage	eMMC 8G
Real Time Clock	RTC x 1, with 3V CR2032 Lithium battery
Security	TPM 2.0
Indicators	Programmable LED control x 4
Cellular	Mini PCIe Connector x 1
Wireless Lan	Onboard WiFi 802.11 b/g/n, Bluetooth 4.2 / BLE
Operating System	Debian 10
Support Protocol	Modbus / MQTT Library (by request)
I/O Interfaces	
Serial Port	—
Ethernet	Gigabit Ethernet x 2, RJ-45
USB	USB 2.0 x 2, Type A
ADC	Differential x 2 CH or Single-End x 4 CH, Phoenix Connector Input Range: 0~15V, 0~20mA Resolution: 16 bit
DI/DO	Isolation DI x 4 CH, Phoenix Connector Voltage Level: ON:9~24V, OFF:0~8V Isolation DO x 4 CH, Phoenix Connector Load Voltage: DC 24V Max Load Current: 100mA/ channel
CAN Bus	—
Display	—
Power Connector	Lockable DC jack
Debug Port	Micro USB x 1
Expansion Slot	SIM card slot x 1 Micro SD slot x 1
Other Interface	—
Power Supply	
Power Requirement	DC9-30V
Power Consumption	3.36 W (Full Loading)
MTBF (Hours)	855590
Environmental and Mechanical	
Dimension	4.3" x 4.33" x 1.54" (109 x 110 x 39 mm)
Weight	430 g
Mount Options	Wallmount, Din Rail (Optional)
Operation Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
Storage Temperature	-40 °F ~ 176 °F (-40 °C ~ 80 °C)
Operation Humidity	10% ~ 95% relative humidity, non-condensing

## Support List of PLC or Controller

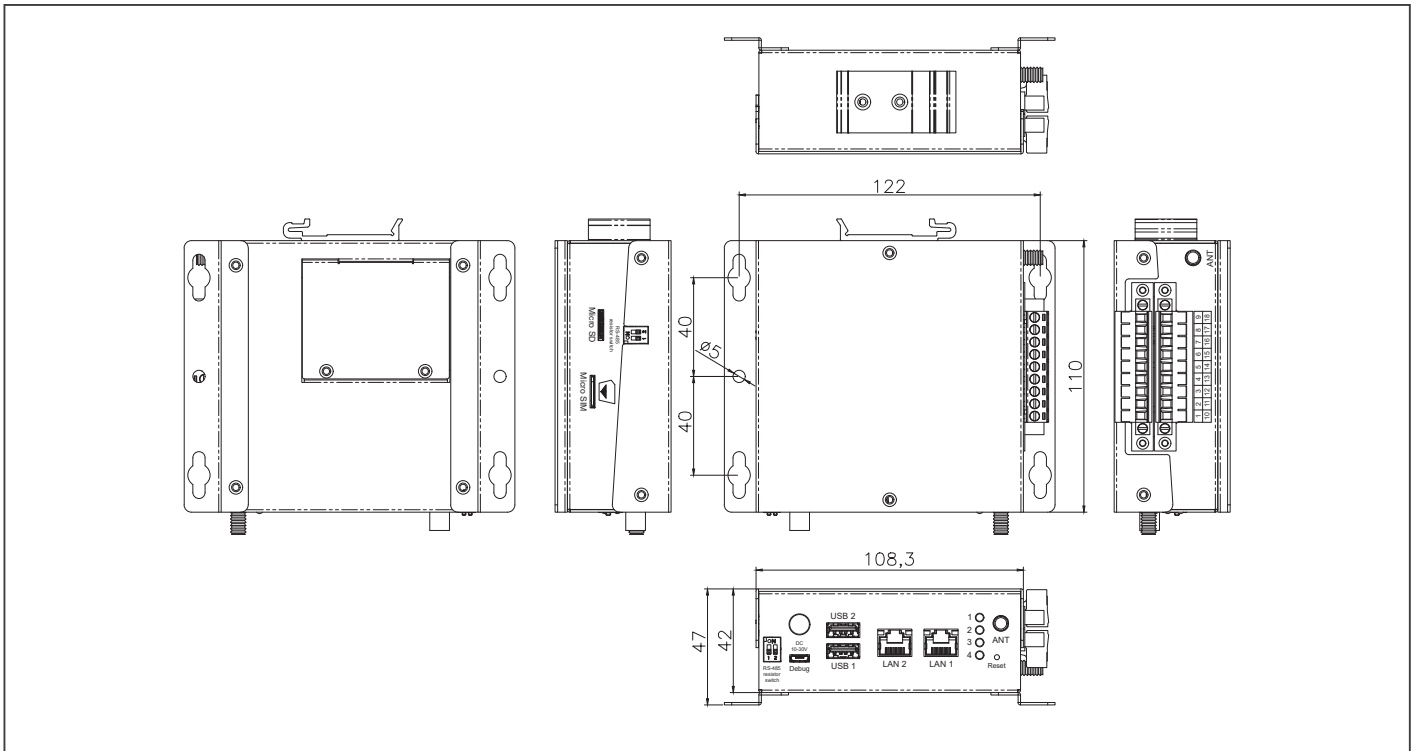
Brand	Model Series
Allen-Bradley	SLC-500 Ethernet
OPCTechs	GE SRTP Ethernet
Koyo	Modbus TCP for H0/H2/H4- ECOM100
Mitsubishi	All PLC
OMRON	CS & CJ Ethernet, CS & CJ Serial, CV Ethernet, CV Serial
Siemens	S7 Ethernet
Yaskawa	CP218TX Ethernet

## Optional RF Module

Type	Model Series
3G/4G/LTE	Quectel EG25-G
NB-IoT	Quectel BG96
CAT-M1	Quectel BG96
CAT 1	Quectel EC21 Series
LoRaWAN	RisingHF RHF0M301-868/915
Zigbee	Redpine RS9113

## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	Memory	Thermal	Ports	Storage	LAN	USB	Expansion slot	Power	Operation Temp.	Others
SRG-ADIO-A10-0001	ARM Cortex-A8 800MHz	Onboard DDR3L 1G	Fanless	4 Channel Isolated Digital Input / Output 2 Channel Analog Input (Phoenix)	eMMC 8GB, MicroSD x1	GbE x2	USB 2.0 x2	Mini PCIe slot x 1, SIM card socket x 1	DC 9-30V	0°C ~ 60°C @ 0.5 m/s airflow	3G/4G LTE module (optional)

## Packing List

- SRG-ADIO

## Optional Accessories

- **1255300366**  
Power Adapter. AC/DC. 100-240VAC. 12VDC/3A.36W.
- **9741EG25G0**  
PCIe mimi card. 4G LTE. module kit. Global Band W/SIM holder. W/Cable & antenna. Quectel. EG25-G
- **9651352C02**  
DIN rail kit. 47x25mm. SRG-3352C series
- **9651352C01**  
Wallmount kit. 110x26mm. SRG-3352C series

## Installation Scenario



DIN-Rail Mount Illustration



Wallmount Illustration

## Optional Software Accessories

- OPC UA Stack
- EtherCAT Stack
- PROFIBUS Stack
- PROFINET Stack
- EtherNet/IP Stack
- IO-Link Stack
- MQTT
- Modbus