

# SCI-QM44

## Industrial IoT Edge Gateway with ARM Cortex-M4



### Features

- LTE 4G Wireless connectivity
- Wireless: CAT-NB/M1, Wi-SUN upon request
- GPS support (via 4G LTE or CAT-NB/M1 Module)
- Industrial grade programmable I/O
- Multiple I/O interface connections for data collection
- Embedded real-time OS support
- Data logger with time stamp
- Wide operating temperature -20 ~ 70°C

### Specifications

System	
CPU/MCU	ARM Cortex M4
Memory	128 M-bit Flash
Storage	External microSD slot, max. 32 GB
Real time clock	Yes
Indicators	16 x LED indicator
Cellular	1 x mPCIe Connector (UART Signal)
Wireless LAN	BT 5.1
Operating System	Non-OS
Support Protocol	Modbus/RTU
Power Supply	
Power Requirement	12/24 VDC
Power Consumption	12V/3.9W, 24V/4.96W, normal used
MTBF (Hours)	--
Environmental and Mechanical	
Dimension	106 x 91 x 44 mm (4.17" x 3.58" x 1.73")
Weight	0.45 kg
Mouting/Installation	Din Rail
Operating Temperature	-20 ~ 70 °C (-4 ~ 158 °F)
Storage Temperature	-40 ~ 85 °C (-40 ~ 176 °F)
Operating Humidity	5% ~ 95% relative humidity, non-condensing
Certification	
Regulations	CE, FCC
Carrier	Planning
Interface	
Serial Port	1 x RS-485 (2W, 3W), Terminal Block 3pin
CAN Bus	--
Ethernet	1 x 10/100 Mbps LAN, RJ45
USB	--
ADC	--
DI/DO	4 x Digital input 4 x Digital output 2 x Relay

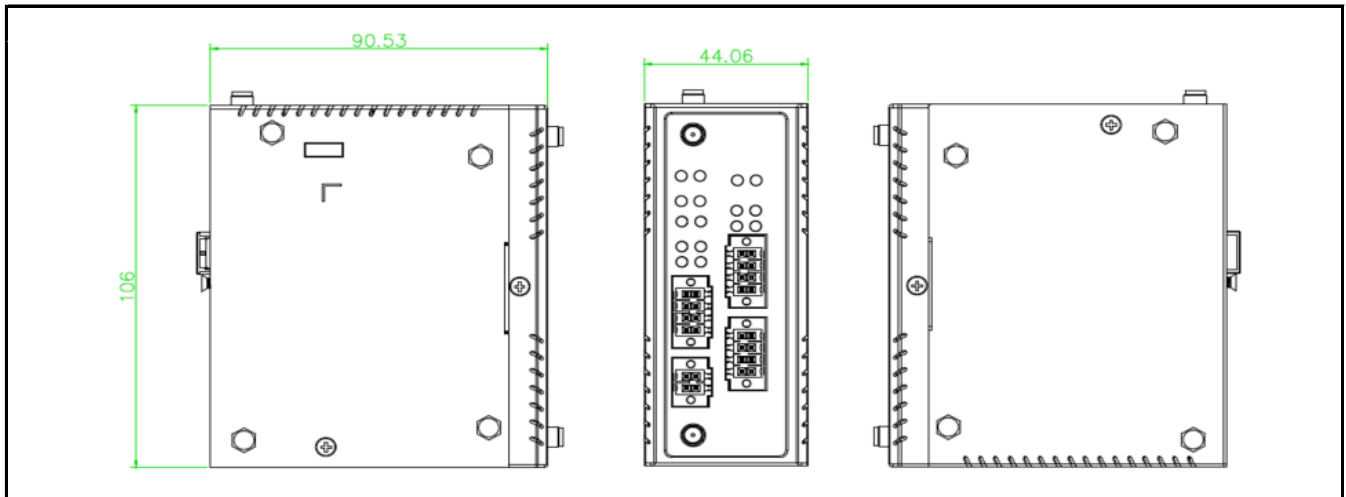
Digital Output	
Connector	Terminal Block (8 pins)
Number of Channels	4 channels
Output types	P-switching
Output Filter	Output delay adjustable from 0 to 10s: No delay, 500 ms, 1s, 2s, 5s, 10s
Max output current	0.5 A
Actuator connection	2-wire, with external DO power supply
DO external power supply	Rated voltage: 24 VDC Range: 9.6 ~ 31.2 VDC
Reverse polarity protection	No
Short-circuit proof	Output Channel Yes
Individual channel diagnostic	Yes
Safe Value	Yes, Programmable
Power on value	Yes, Programmable
Digital Input	
Connector	Terminal Block (8 pins)
Number of Channels	4 channels
Input types	IEC61131-2 TYPE 3
Input Filter time	Input delay adjustable from 0 to 40 ms: disabled, 0.3 ms, 3 ms, 10 ms, 20 ms, 40 ms
Input mode	DI or event counter
Input counter frequency	20 Hz
Low Input Voltage	< 5 VDC
High Input Voltage	> 11 VDC
Sensor connection	2/3 Wire
External DI power supply	Rated voltage: 24 VDC Range: 9.6 ~ 31.2 VDC
Reverse polarity protection	Yes
Short-circuit proof	Yes

AI/AO	4 x Analog input (4 x TC or 2 x 4wire RTD)
Display	--
Power Connector	1 x Terminal Block 3 pin
Debug Port	1 x Micro USB for console
Expansion Slot	1 x SIM card slot 1 x microSD slot
Other Interface	--

Individual channel diagnostic	Yes
<b>Analog Input</b>	
Connector	Terminal Block (8pins)
Number of Channels	4 channels
Voltage Input	±1 V, ±5 V, ±10 V, ±100 mV, ±500 mV
Current Input	±20 mA, 0 ~ 20 mA, 4 ~ 20 mA
Resolution	16 bits
Sampling Rates	8 Hz
Accuracy	±0.1% of FSR
Channel Independent Configuration	Yes
Input Impedance	Voltage: > 1G KΩ Current: 45 Ω
Overvoltage Protection	Yes
Overcurrent Protection	Yes

## Dimension

Unit: mm / inch



## Ordering Information

### Packing List

- 1 x Antenna
- 1 x DIN Mounting Kits
- 6 x Terminal Block

### Part Number

2SCI-QM44-01 Protocol Gateway, 4 x DI, 2 x Relay, Ethernet, RS-485, 12/24 VDC

## Optional Accessories

### Part Number / Item

4G LTE	mPCIe 4G LTE Module
CAT-NB/M1	mPCIe 4G CAT-NB/M1 Module
Antenna	Antenna GPS
Adapter	Power Adapter, AC/DC, 100 ~ 240 VAC, 12 VDC/3A, 36W