



### Product Feature:

- Powered by ARM Cortex M4
- 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 range -20°C to 70°C

### Specifications

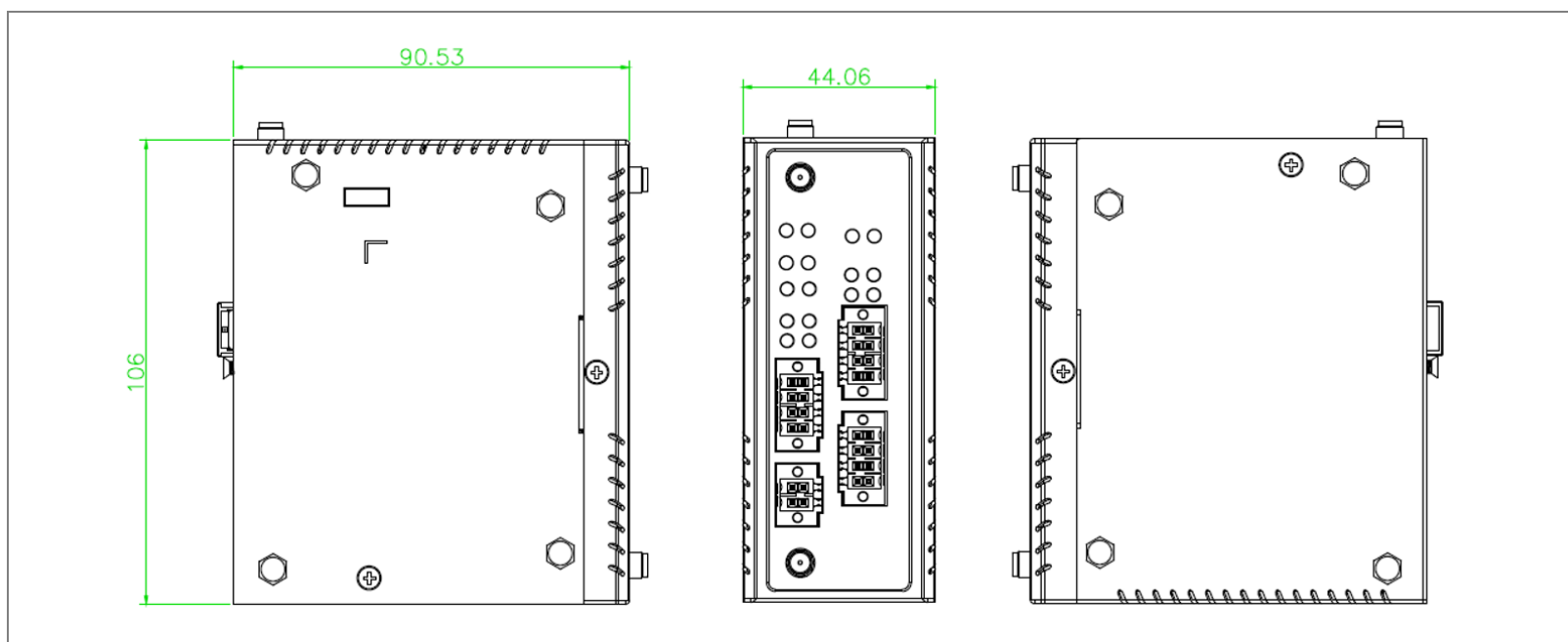
System	
CPU/MCU	ARM Cortex M4F
Memory	128 M-bit Flash
Storage	External Micro SD slot, Max. 32GB
Real time clock	Yes
Indicators	LED indicator x 10
Cellular	Mini PCIe Connector x 1 (UART Signal)
Wireless LAN	BT 5.0
Operating System	Embedded real-time OS: Zephyr Version: 3.0.99
Support Protocol	Modbus RTU to MQTT
Power Supply	
Power Requirement	12/24 VDC
Power Consumption	12V/2.29W, 24V/3.14W, Normal used
MTBF (Hours)	--
Environmental and Mechanical	
Dimension	4.17" x 3.54" x 1.73" (106 x 90 x 44 mm)
Weight	450 g
Mouting/Installation	Din Rail
Operating Temperature	-4 °F ~ 158 °F (-20 °C ~ 70 °C)
Storage Temperature	-40 °F ~ 176 °F (-40 °C ~ 85 °C)
Operating Humidity	5% ~ 95% relative humidity, non-condensing
Certification	
Regulations	CE, FCC
Carrier	Planning

Interface	
Serial Port	1 x RS232/RS485(2W,3W), Terminal Block
Ethernet	1 x 10/100Mbps LAN, RJ45
USB	--
ADC	--
DI/DO	4x Digital input, 4x Digital output, 2x Relay
AI/AO	4 x Analog input or 4 x TC or 2 x 4wire RTD
CAN Bus	--
Display	--
Power Connector	1 x 3pin Terminal Block
Debug Port	1 x Micro USB for console
Expansion Slot	1 x SIM card slot 1 x Micro SD slot
Other Interface	--

Radio Frequency		
<b>LTE 4G (CAT 1)</b> (by model)	3GPP Rel.9 compliant protocol Frequency bands: FDD LTE: B1 /B2 /B3 /B4 /B5 /B7 /B8 /B12 /B13 /B18 /B19 /B20 /B25 /B26 /B28 TDD LTE: B38/B39/B40/B41 WCDMA: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8	SIM card size: Micro-SIM slot Antenna type: External type Antenna connector: SMA-Male
<b>CAT-NB / CAT-M1</b> (by model)	3GPP Rel.9 compliant protocol Frequency bands: FDD LTE: B1 /B2 /B3 /B4 /B5 /B7 /B8 /B12 /B13 /B18 /B19 /B20 /B25 /B26 /B28 TDD LTE: B38/B39/B40/B41 WCDMA: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8	SIM card size: Micro-SIM slot Antenna type: External type Antenna Connector: SMA-Male
<b>GPS (by model)</b>	GPS/GLONASS/BeiDou (Compass)/Galileo	

## Dimension

Unit: mm / inch



## Ordering Information

Part Number	Packing List
<b>SPG-QM44-A10-0000</b> Protocol Gateway, ARM Cortex M4, 12/24VDC	<b>SPG-QM44-A10-0000</b> 1 xSPG-QM44, 1 xDIN Mounting Kits
<b>SPG-QM44-A10-0001</b> Protocol Gateway, ARM Cortex M4, LTE 4G, 12/24VDC	<b>SPG-QM44-A10-0001</b> 1 xSPG-QM44, 1 xLTE 4G Module, 1 xAntenna, 1 xDIN Mounting Kits
<b>SPG-QM44-A10-0002</b> Protocol Gateway, ARM Cortex M4, NB/M1, 12/24VDC	<b>SPG-QM44-A10-0002</b> 1 xSPG-QM44, 1 xCAT-NB/M1 Module, 1 xAntenna, 1 xDIN Mounting Kits

## Optional Accessories

Part Number / Item			
9741EG25G0	PCIe mimi card. 4G LTE. EG25-G	978966660G	Antenna. GPS
9697PT0003-D	PCIe mimi card. CAT-NB/CAT-M1. EXS62	1255X00072	Power Adapter. AC/DC. 100-240VAC. 12VDC/3A.36W.
170X000099	Antenna, LTE / CAT-NB and M1, Full Band		