

# SPG-M041

## Industrial IoT Edge Gateway with ARM Cortex-M4F



### Features

- Powered by ARM Cortex M4
- Dual wireless connectivity (LTE 4G as default)
- Wireless: CAT-NB/M1, Wi-SUN upon request
- GPS support (via 4G LTE or CAT-NB/M1 Module)
- Dual 10/100 Mbps Ethernet ports
- Multiple I/O interface connections for data collection
- Embedded real-time OS support
- Data logger with time stamp
- Wide temperature 20 ~ 70 °C

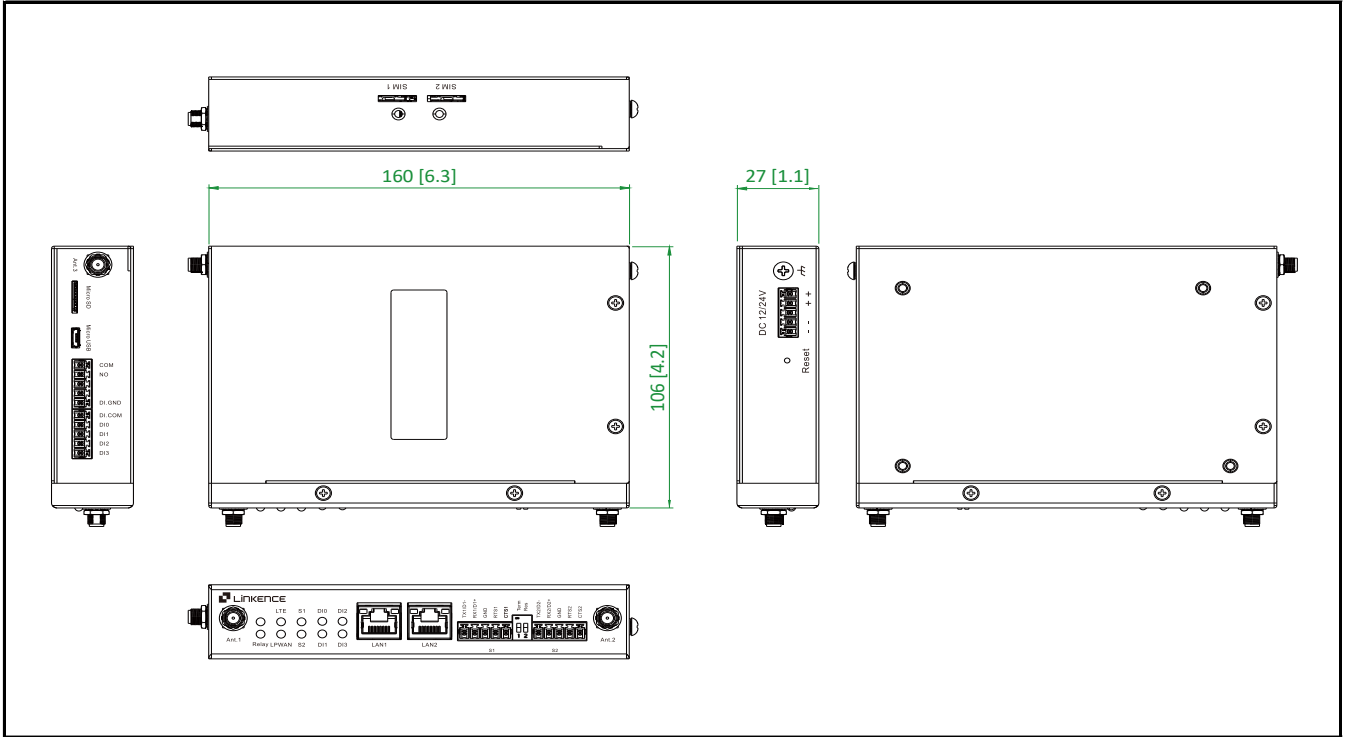
### Specifications

System	
CPU/MCU	ARM Cortex M4F
Memory	On Board 128 M-bit Flash
Storage	External microSD slot, max. 32 GB
Real time clock	1 x RTC, with 3V CR2032 lithium battery
Indicators	10 x LED indicator
Security	--
Cellular	1 x mPCIe Connector (UART Signal)
Wireless LAN	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	160 x 106 x 27 mm (6.29" x 4.17" x 1.06")
Weight	0.67 kg
Mouting/Installation	Din Rail
Operating Temperature	-20 ~ 70 °C (-4 ~ 158 °F)
Storage Temperature	-40 ~ 80 °C (-40 ~ 176 °F)
Operating Humidity	5% ~ 95% relative humidity, non-condensing
Certification	
Regulations	CE, FCC
Carrier	Planning

Interface	
Serial Port	2 x RS232/RS485 (2W, 3W), Terminal Block
CAN Bus	--
Ethernet	2 x 10/100 Mbs, with auto MDI/MDI-X
USB	--
ADC	--
DI/DO	4 x DI Channels, Wet/Dry Contact, Terminal Block 1 x Relay channel
AI/AO	--
Display	--
Power Connector	1 x Terminal Block 5pin
Debug Port	1 x Micro USB for console
Expansion Slot	1 x SIM card slot 1 x microSD slot
Other Interface	3 x SMA for RF Module

# Dimension

Unit: mm / inch



# Ordering Information

## Packing List

- 4 x Terminal Block
- 1 x DIN Mounting Kits

## Part Number

2SPG-M041-xx	Protocol Gateway, ARM Cortex M4, ARM Cortex M4, 12/24 VDC
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# Optional Accessories

## Part Number / Item

4G LTE	PCIe mini card, 4G LTE Module
CAT-NB/CAT-M1	PCIe mini card, CAT-NB/CAT-M1 Module
Antenna	Antenna GPS
Wi-Fi	PCIe card, Wi-Fi Module
Adapter	Power Adapter, AC/DC, 100-240 VAC, 12 VDC/3A 36W