

SIG-M101

IoT Gateway Controller



Features

- Powered by NXP i.MX 8M Plus Quad Cortex-A53 /M7 Processor
- Onboard DDR4L 2GB/4GB/8GB / eMMC 16GB/32GB
- 2 x Serial port (RS232/485/422)
- CAN-FD x 2CH
- 2 x Mini-PCIe connector for RF Module
- Support RTC, TPM 2.0
- 9-36V DC, wide-range power input
- Pre-Install Linux Debian 10, Yocto kirkstone 5.15, Ubuntu 22.04
- Wide Temperature -20 °C ~ 70 °C

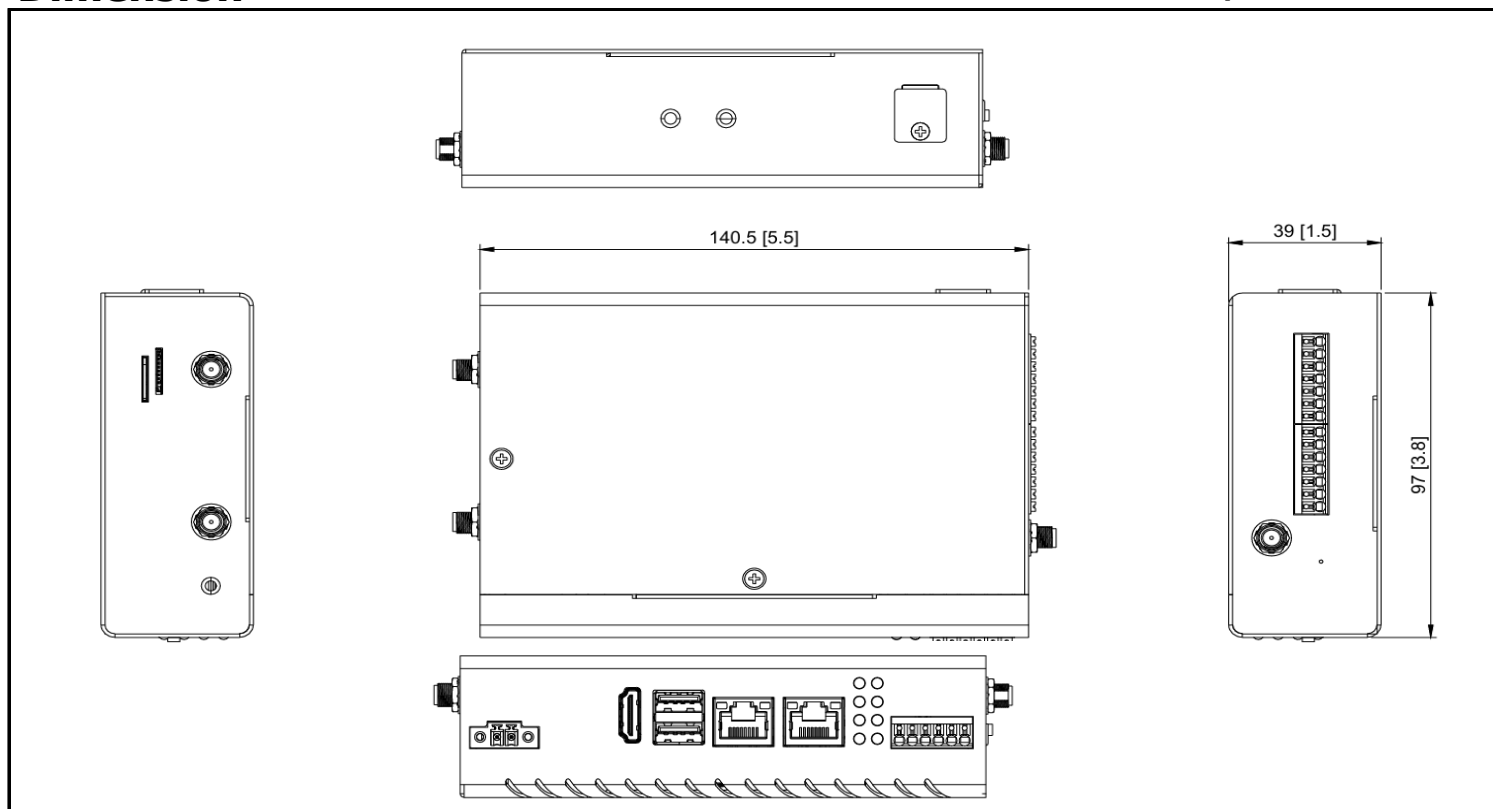
Specifications

System	
CPU/MCU	NXP i.MX 8M Plus, Quad-Core ARM Cortex-A53/M7 Processor
Memory	DDR4L 2GB / 4GB / 8GB(Optional)
Storage	eMMC 16GB / 32GB (Optional)
Real time clock	1 x RTC
Indicators	7 x LED indicators
Security	1 x TPM 2.0
Cellular	1x Mini-PCIe connector 3052
Wireless LAN	1x Mini-PCIe connector 3052
Operating system	Linux Debian 10, Yocto kirkstone 5.15 Ubuntu 22.04 (Optional)
Support Protocol	--
Power Supply	
Power Requirement	DC-In 9~36V
Power Consumption	9.36W (Full Loading)
MTBF (Hours)	479,374
Environmental and Mechanical	
Dimension	5.5" x 3.9" x 1.5" (140.5 x 98 x 39 mm)
Weight	500g
Mounting/Installation	Din Rail
Operating Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	10% ~ 95% relative humidity non-condensing
Environmental and Mechanical	
Regulations	CE, FCC
Carrier	Planning

Interface	
Serial Port	2 x RS232/RS485, Phoenix Connector
Ethernet	2 x Gigabit Ethernet, RJ45
USB	2 x USB 3.0 type A
ADC	--
DI/DO	--
AI/AO	--
CAN Bus	2CH x CAN-FD, Phoenix Connector
Display	1 x HDMI (Output)
Power Connector	1 x Terminal Block 2pin
Debug Port	1 x Micro USB
Expansion Slot	'1 x MicroSD slot 1 x SIM card slot
Other Interface	3 x SMA for RF Module

Dimension

Unit: mm / inch



Ordering Information

Part Number	Packing List
2SIG-M101-01-01 Protocol Gateway ARM Cortex A53/M7 DDR4L 2GB eMMC 16GB DC-In 9~36V	1 x DIN Mounting Kits 1 x Terminal Block
2SIG-M101-12-01 Protocol Gateway ARM Cortex A53/M7 DDR4L 4GB eMMC 32GB DC-In 9~36V	
2SIG-M101-22-01 Protocol Gateway ARM Cortex A53/M7 DDR4L 8GB eMMC 32GB DC-In 9~36V	

Optional Accessories

Part Number / Item			
4G LTE	Mini-PCIe card. 4G LTE Module	Adapter	Adapter AC/DC 100-240VAC 12VDC
Antenna	Antenna GPS	Power Cord	Power Cord
Wi-Fi	Mini-PCIe card. Wi-Fi Module		