



Product Features

- Quad -core A9, clocked at 1.4GHz
- 4 x fully isolated RS485 ports
- 2 x 100M/10M Ethernet ports
- Support remote monitoring
- Support firmware upgrade
- Support alarm setting and push
- Support JavaScript script editing for logical control
- Support data storage and WebScada configuration
- Operating temperature: -40 ~ 85°C
- Support 5G routing
- Supports up to 5000 data points



Product Introduction

LM Gateway503-1oT is a core connection device for industrial IoT scenarios, acting as a bridge between industrial equipment and upper-level systems (such as cloud platforms, SCADA systems, MES systems, etc.). It provides users with a unified data interface and protocol through reliable data collection, analysis, and transmission capabilities, and is an ideal choice for digital factories, smart buildings, and energy management. The IoT gateway integrates time series databases and webscada functions, providing components for gateway-based edge storage and data monitoring.

Product Specifications

Hardware Parameters	Memory	512Mbyte DDR3 high performance memory
	Nand Flash	MLC eMMC onboard is 8GByte eMMC
	Serial Port	4 * RS485
	Network port	2 * LAN port
	USB Port	1 * USB HOST interface
	Power supply	DC9V ~ 48V , support anti-reverse connection, anti-lightning, over-current protection, etc.
	LED Indicator	POWER , SYS , serial port sending and receiving instructions
	Enclosure protection grade	IP50
	Power consumption	The maximum average power consumption of the whole machine is ≤ 6W
	Mechanical Installation	DIN rail slot fixing
Environmental parameters	Working relative humidity	20 ~ 90 % No condensation
	Storage and transportation relative humidity	15 % ~ 95 % No condensation

Northbound Data Services

The gateway provides a variety of data services for SCADA , power, BA and other automatic control systems.

- Modbus Services
- BACnet Services
- OPC UA Services
- IEC104 Services
- OPC XML-DA Server
- S7 Server

IoT

The gateway communicates with the cloud server via the MQTT protocol.

- Alink
- IoTDA
- Amazon
- Private Cloud
- LM ThingsIoT Value-added Cloud Service

List of southbound data collection drivers (supporting customization of privatization protocols)

	Data acquisition driver	Serial Port	Network port
Meter	Modbus	Modbus RTU	Modbus TCP
		ModbusAscii	Modbus RTU_over_TCP
		ModbusRTUBroadcast	
		ModbusRTU Monitoring	
		ModbusRTU Service	
	DLT645	DLT645-1997	DLT645_over_TCP
		DLT645-2007	
DLT645.98			
DLT645 Monitor			
CJ188	CJ188	CJ188_over_TCP	
Mbus	MBus_EnergyMeter		
	MBus_EN1434		
PLC	Mitsubishi	Mitsubishi Fx3U	MC_Qna-3EBinary
		Mitsubishi Fx485	MC_Qna-1EBinary
			EtherNet /IP CIP
	Siemens	Siemens S7-200 PPI	Siemens S7 FetchWrite
	AB	Allen_Bradley_DF1	AB NET
	Omron	HOSTLINK-FINS	OMRON_FINS
		HOSTLINK-CMODE	
	Matsushita	Mewtocol	EtherNet /IP CIP
	Yokogawa		Yokogawa PLC
FUJI		FUJI_SPH_NET	
KEYENCE		KEYENCE host link communication	
OPC			OPC UA
			OPC DA
			OPC XML DA
IEC			IEC104
			IEC61850
CNC			FANUC
			Kaneti
			Siemens
Smart Buildings	BACnet	BACnet MS/TP	BACnet IP
		BACnet Routing	
		Hitachi Elevator	
Smart lighting			KNX IP
Database			SQL Server
			MySQL
IT Interface			MQTT Client
			HTTP Client

Gateway dimensions and installation diagram

- Back rail and mounting ear installation

