Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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FEATURE HIGHLIGHTS

- Industrial EMC protection, Opt. Serial port Isolation, -20°C~70°C operation
- 2 Fast-Ethernet ports, dual-subnet or redundancy
- 8/16 sw-selectable RS-232/485/422 (*) RJ45 serial ports, up to 921kbps
- 24~48 VDC Power Input or 100~240 VAC Power input (EU or US version)
- Bi-Directional Modbus TCP/RTU/ASCII conversion from Serial to Ethernet and viceversa, VirtualCOM support, advanced Modbus Options available
- Supports SNMPv1/v2c/v3, Embedded security with IPsec VPN
- Configuration via Web Browser / Serial Console / Telnet Console / Windows Utility / LCM Matrix

* : RS-232/RS-485-RS-422 function is available on non-isolated versions. Isolated versions support RS-485 and RS-422 only

PRODUCT DESCRIPTION
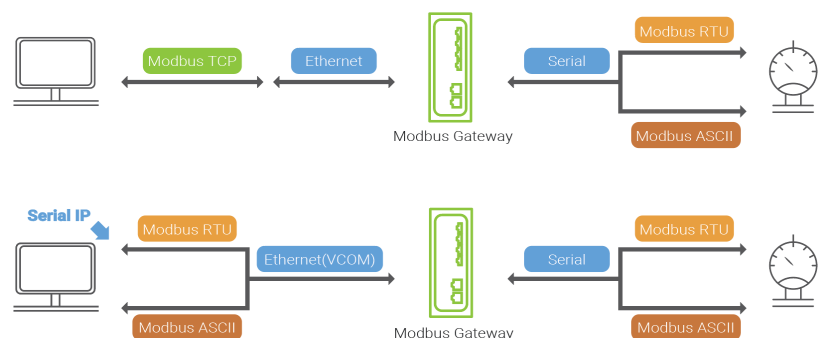
Diverse Hardware Infrastructure
Modbus Gateway supports the four most commonly used communication standards, RS-232/485/422, and Ethernet. The ease-of-use configuration utility provided with Modbus Gateway can quickly select the hardware interface, and easily switch to the existing communication infrastructure. You could set it up via Web Browser, Serial Console, Telnet Console, Windows Utility or through the LCM display in front of the device. Industrial EMC protection makes MB5908/16 ready for every mission.

Advanced embedded security
MB5908/16 embeds IPsec VPN Encryption, that allows you to tunnel your data throught the internet and prevent unauthorized control of your Serial Devices by malicious people.

Switching between Modbus Protocols
Modbus Gateway supports the standard Modbus protocol and is capable of converting any Modbus protocols between Modbus TCP, Modbus RTU, and Modbus ASCII for all supported hardware interfaces. All of this, in bi-directional mode: Ethernet and Serial ends can selected to be either master or slave
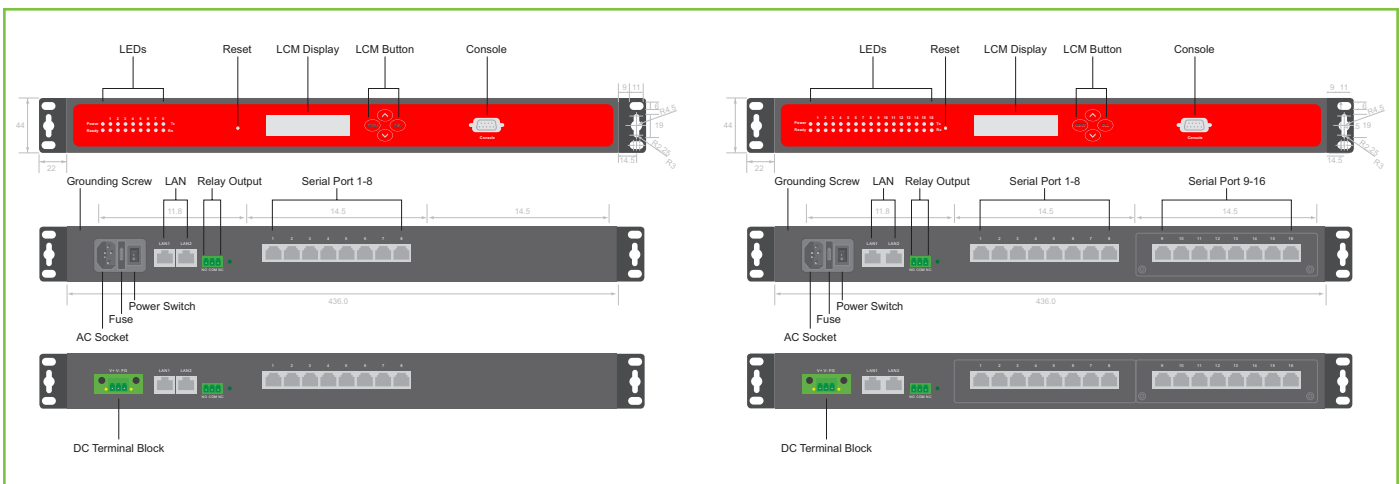
Modbus ID Routing
Modbus Gateway supports various types of hardware communication interfaces, Modbus protocol conversion, and Modbus ID routing. Therefore the Modbus Gateway can integrate your existing and complex Modbus hardware configuration into a simple network that can be easily managed.

SPECIFICATIONS

Technical Specifications	
Model Name	MB5908 (8-port) / MB5916 (16-port)
Network interface	
Speed	IEEE 802.3 10BaseT IEEE 802.3u 100BaseT(X)
LAN Mode	Dual Subnets or Network Redundancy
Connector ports	2x 10/100BASE-T(X) RJ-45
Serial Interface	
Connector	RJ45 RS-232/422/485 software selectable (-N models) or RJ45 Isolated RS-422/485 software selectable (-SiS models)
Ports	8 (MB5908) or 16 (MB5916)
Baud Rate	1,200 ~ 921,600 bps software selectable
Data Bits	5, 6, 7, 8 software selectable
Stop Bits	1, 2 software selectable
Parity	None, Odd, Even, Space, Mark
Flow Control	None, Xon/Xoff, RTS/CTS (RS-232 only)
Isolation	2.5 kV (SiS versions only)
Power	
Input Voltage Input Current Power Consumption	DC version: 24 - 48VDC; US-EU version: 100~240 VAC (EU or US Plug) DC version: 0.54 A @24VDC; US-EU version: 0.21A@100VAC Approximately 21 W (Max)
Connector	DC version: 5.08mm 3-pin Lockable Terminal Block EU-US version: IEC 60320-1 C14 AC Power Inlet
Power Redundancy	No
Reverse Polarity Protection	Yes (DC version only)
Relay Output	Yes (1)
Physical Characteristics	
Housing Dimension (W x H x D) Weight Installation Reset Button	IP30 SPCC housing 436 mm x 43.5 mm x 200 mm 3,000g (8-port version); 3,200 g (16-port version) 19" Rack-Mount (Kit included) Yes
Environmental Limits	
Operating Temperature Storage Temperature Ambient Relative Humidity	-20°C~70°C (-4°F~158°F) -40°C~85°C (-40°F~185°F) 5%~95% (Non-condensing)
Sofware	
Protocols	IPv4, ICMP, TCP, UDP, DHCP Client, SNMPv1,v2c,v3, HTTP, HTTPS, Telnet, RFC2217, Security through IPsec host-to-host or host-to-side VPN with up to 37.9Mbps VPN throughput
Configuration	Atop Management Utility, Web UI, Telnet, Serial Console, LCM Display

VirtualCOM	Windows/Linux redirection software
Modbus Features	
Supported Modes	Ethernet: Modbus TCP Server/Client(or VCOM); Serial: Modbus RTU/ASCII (master/slave)
Maximum number of clients/slaves	Modbus TCP: Maximum 16 clients; Maximum 32 slave connections

DIMENSIONS & LAYOUT

REGULATORY APPROVALS

Regulatory Approvals			
Safety	EN60950-1:2006/ IEC60950-1 LVD		
EMC	FCC Part 15, Subpart B, Class B EN 55022, Class B, EN 61000-3-2, EN 61000-3-3, EN 55024		

Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge Air Discharge	±8kV ±15kV	4 4
IEC 61000-4-3	RS	Radiated (enclosure)	10 V/m	3
IEC 61000-4-4	EFT	AC Power Port DC Power Port Signal Port	±4.0KV ±4.0KV ±2.0KV	4 4 3
IEC 61000-4-5	Surge	AC Power Port AC Power Port DC Power Port DC Power Port Signal Port	Line-to Line±2.0KV Line-to Earth±4.0KV Line-to Line±1.0KV Line-to Earth±2.0KV Line-to Earth±2.0KV	4 4 3 3 4
IEC 61000-4-6	CS	AC Power Port DC Power Port Signal Port	10 V rms 10 V rms 10 V rms	3 3 3

IEC 61000-4-8	PFMF	Enclosure	1 A/m	3
IEC 61000-4-11	DIP	AC Power Port	-	-
Shock Drop (Freefall) /Vibration		IEC 60068-2-27 ISTA Test Procedure 2A /IEC 60068-2-64		
RoHS II		Yes		
MTBF		TBD		
Warranty		5 years		

ORDERING INFORMATION

Ordering information

Model name	Part Number	Description	Ethernet	Serial
MB5908-N-DC	1P1MB590800001G	8-Port Modbus Gateway, RJ45, RS232/422/485 DC	2 (RJ45)	8 (RJ45)
MB5908-SiS-DC	1P1MB590800002G	8-Port Modbus Gateway, RJ45, Isolated RS422/485 DC	2 (RJ45)	8 (RJ45)
MB5916-N-DC	1P1MB591600001G	16-Port Modbus Gateway, RJ45, RS232/422/485 DC	2 (RJ45)	16 RJ45
MB5916-SiS-DC	1P1MB591600002G	16-Port Modbus Gateway, RJ45, Isolated RS422/485 DC	2 (RJ45)	16 RJ45
MB5908-N-EU	1P1MB590800013G	8-Port Modbus Gateway, RJ45, RS232/422/485 EU Plug	2 (RJ45)	8 (RJ45)
MB5908-N-US	1P1MB590800003G	8-Port Modbus Gateway, RJ45, RS232/422/485 US Plug	2 (RJ45)	8 (RJ45)
MB5916-N-EU	1P1MB591600013G	16-Port Modbus Gateway,RJ45,RS232/422/485 EU Plug	2 (RJ45)	16 RJ45
MB5916-N-US	1P1MB591600003G	16-Port Modbus Gateway,RJ45,RS232/422/485 US Plug	2 (RJ45)	16 RJ45
MB5908-SiS-EU	1P1MB590800004G	8-Port Modbus Gateway, RJ45, Isol. RS422/485 EU Plug	2 (RJ45)	8 (RJ45)
MB5908-SiS-US	1P1MB590800014G	8-Port Modbus Gateway, RJ45, Isol. RS422/485 US Plug	2 (RJ45)	8 (RJ45)
MB5916-SiS-EU	1P1MB591600014G	16-Port Modbus Gateway,RJ45,Isol. RS422/485 EU Plug	2 (RJ45)	16 RJ45
MB5916-SiS-US	1P1MB591600004G	16-Port Modbus Gateway,RJ45,Isol. RS422/485 US Plug	2 (RJ45)	16 RJ45
SDK version	Contact HQ	SDK Programmable version, ask HQ for information	2 (RJ45)	8/16

Optional Accessories

Model name	Part Number	Description
SDR-75-24	50500752240001G	75W/3.2A DIN-Rail 24VDC power supply with 88~264VAC / 124~370VDC input
AD17-24C (US-Y)	50500151240002G	Y-Type power adaptor,100-240VAC input, 0.6A @ 24VDC output, US plug
AD17-24D (EU-Y)	50500151240012G	Y-Type power adaptor,100-240VAC input, 0.6A @ 24VDC output, EU plug
GDC-120	59906861G	120mm copper woven grounding cable
CBL-RJ45(8P)-DB9(M)-90	50891781G	RJ45 to DB9 Male Cable, 90cm
CBL-RJ45(8P)-DB9(M)-200	50891951G	RJ45 to DB9 Male Cable, 200cm
CBL-RJ45(8P)-DB9(F)-90	50891791G	RJ45 to DB9 Female Cable, 90cm
CBL-RJ45(8P)-DB9(F)-90-C	50891971G	RJ45 to DB9 Female Cross Over Cable, 90cm
CBL-RJ45(8)-DB9(F)-200-C	50891961G	RJ45 to DB9 Female Cross Over Cable, 200cm
RMK-718-Black	70100000000040G	Rack Mount Mounting-Kit, Black
Power Cable (US)	50801041G	6 feet Power Cable, US
Power Cable (EU)	50801051G	6 feet Power Cable, EU
Fuse	50709441G	SFP Transceiver, 1250Mbps, 1310nmDFB, Single-mode, 30km, 3.3V, -40~85°C

v: 0.3