![Atop Technologies logo]

Atop Technologies, Inc.

Industrial Modbus Gateway

MB5404D-X Series

Hardware Installation Guide

Version 1.2

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P/N: 89900429G

Introduction

Thank you for choosing the MB5404D-X Atop Industrial Modbus Gateway Series. The MB5404D-X Series with 4 serial ports is designed to transfer data between Modbus TCP and Modbus RTU/ASCII protocol; it can also serve as an Ethernet master to control serial slaves, or as a serial master to control Ethernet slaves.

Model	Description
MB5404D-X	4-port Modbus Gateway with dual LAN, RS-232/422/485 software selectable with DB9 connectors, DIN-Rail type
MB5404D-Sis-X	4-port Modbus Gateway with dual LAN, RS-422/485 software selectable with isolation TB5 lockable connectors, DIN-Rail type

Inside the Package

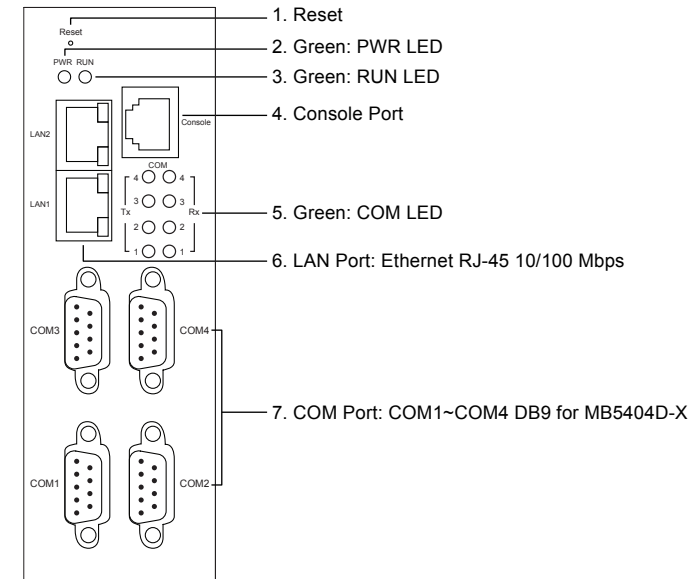| Item	Atop P/N	Amount	Description
MB5404D-X Series		1	Modbus Gateway
Standard Accessories			
Installation Guide	89900429G	1	Hardware Installation Guide (Warranty card is included)
CD	89890124	1	Product CD (Information on the product as well as software)
Terminal Block	50707741G	1	7-Pin, 2ESDVM-07P
Terminal Block	50706091G	4	5-Pin, EC381VM-05P

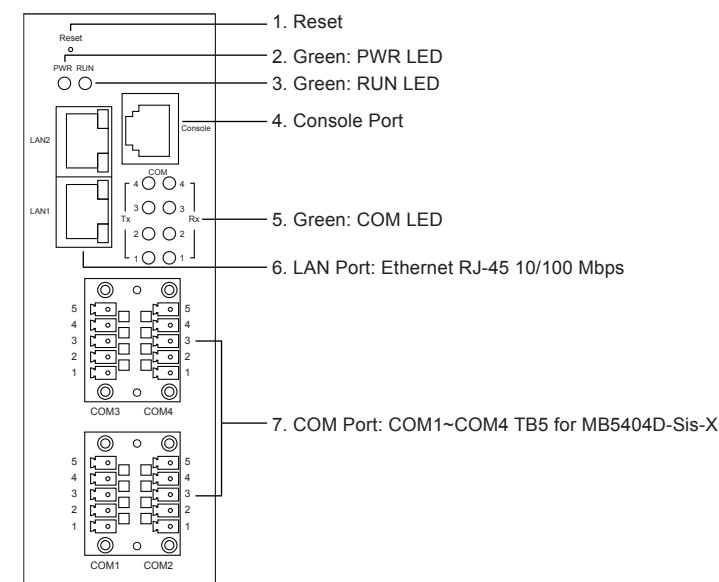Note: 5-Pin Terminal Block only for MB5404D-Sis-X

Optional Accessories

Item	Atop P/N	Amount	Description
Power Adapter	50500151120009G	1	Y-Type (BT1-10V) power adaptor, 100-240VAC input, 1.25A @ 12VDC output, US plug
Power Adapter	50500151120019G	1	Y-Type (BT1-10V) power adaptor, 100-240VAC input, 1.25A @ 12VDC output, EU plug
Wall Mount Kit	202EH731000003G	2	Metal Wall Mount Kit, Black
DIN-Rail Kit	201EH731000005G	1	Conductive DIN-Rail Kit,Silver
Grounding Cable	59906861G	1	120mm Copper Woven Grounding Cable

Product Description

### MB5404D-X(RS-232/422/485 DB9 without isolation)

1. Reset
2. Green: PWR LED
3. Green: RUN LED
4. Console Port
5. Green: COM LED
6. LAN Port: Ethernet RJ-45 10/100 Mbps
7. COM Port: COM1~COM4 DB9 for MB5404D-X

MB5404D-Sis-X(RS-422/485 TB5 with isolation)

1. Reset
2. Green: PWR LED
3. Green: RUN LED
4. Console Port
5. Green: COM LED
6. LAN Port: Ethernet RJ-45 10/100 Mbps
7. COM Port: COM1~COM4 TB5 for MB5404D-Sis-X

Hardware Installation

1. On the power terminal block, there is a terminal for Frame Ground, you can choose whether to connect it to the grounding or you may opt to connect to the grounding screw next to the terminal block. It is required to connect either of the grounds at all times to ensure overall maximum performance.

2. You can then choose whether to plug in the I/O ports at this point or do it later, also the ends have to be fixed with its screws.

3. Reconfirm that the DIN-Rail has been mounted firmly on the rail. Tilt the device slightly (Fig. 1) to fix it on the DIN-Rail (Fig. 2).
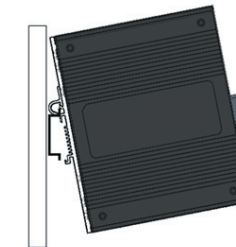
(Fig. 1)   (Fig. 2)
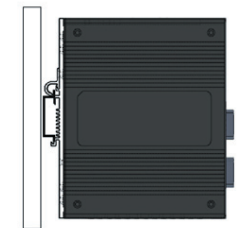
4. Next we can then proceed to connect the device to the LAN (switch or PC), take care on using the RJ-45 connector; after this we can then proceed to the device's settings.

■ The openings to the sides are for the devices heat dissipation. Please never obstruct or cover them with any objects.

■ MB5404D-X Series' factory IP by default is 10.0.50.100. You can access the device by its WebUI once it is connected to a physical network (or use Device View). Please be aware that the PC needed for this procedure needs to be in the same subnet. For more setup information, please refer to the device's manual.

MB5404D-X Series LED Indicators

Name	Color	Status	Description
PWR	Green	Off	System is not powered on
		On	System is powered on
RUN	Green	Off	System is not ready or halt
		Blinking	AP firmware is running normally
LAN	Green	Off	Ethernet is disconnected
		Blinking	Data is transmitting at 100Mbps on this port
	Orange	Blinking	Data is transmitting at 10Mbps on this port
COM	Green	Off	No data is transmitting
		Blinking	Data is transmitting on COM port

Pin Assignment

7-Pin Terminal Block for Power Input

Pin	1	2	3	4	5	6	7
	GND	V1-	V1+	N/A	N/A	V2-	V2+
		PWR1				PWR2	

9-Pin D-sub Connector for RS-232 / 422 / 485

Pin	RS-232	RS-422	RS-485
1	DCD	N/A	N/A
2	RXD	N/A	TXD+
3	TXD	DATA+	RXD+
4	DTR	N/A	N/A
5	SG	SG	SG
6	DSR	N/A	N/A
7	RTS	DATA-	RXD-
8	CTS	N/A	TXD-
9	RI	N/A	N/A

5-Pin Terminal Block for RS-422 / 485

Pin	RS-422 / RS-485 4W	RS-485 2W
1	TXD+	N/A
2	TXD-	N/A
3	RXD+	DATA+
4	RXD-	DATA-
5	SG	SG

Console Port RJ-45

RJ-45			Cross-over Female DB9	
RTS	Pin 1	← →	Pin 8	CTS
DTR	Pin 2	← →	Pin 6	DSR
TXD	Pin 3	← →	Pin 2	RXD
SG	Pin 4	← →	Pin 5	GND
SG	Pin 5	← →	Pin 5	GND
RXD	Pin 6	← →	Pin 3	TXD
DSR	Pin 7	← →	Pin 4	DTR
CTS	Pin 8	← →	Pin 7	RTS

MB5404D-X Series
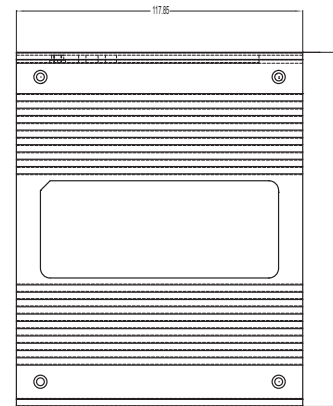# Mechanical Dimensions (Unit=mm)
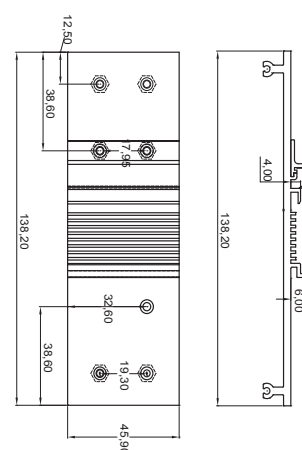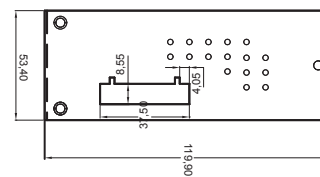
Front View-MB5404D-X Front View-MB5404D-Sis-X
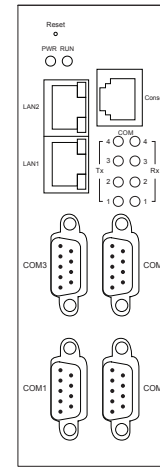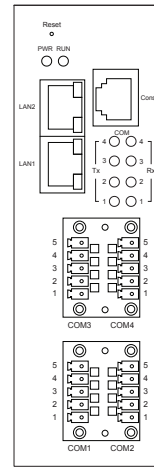
Side View Rear View

Top View

Warranty Policy

Warranty Conditions

Products supplied by Atop Technologies are covered in this warranty for sub-standard performance or defective workmanship. The warranty is not, however, extended to goods damaged in the following circumstances:

(a) Excessive forces or impacts
(b) War or an Act of God: wind storm, fire, flood, electric shock, earthquake
(c) Use of unqualified power supply, connectors, or unauthorized parts/kits
(d) Replacement with unauthorized parts

RMA and Shipping Costs Reimbursement

Customers shall always obtain an authorized "RMA" number from Atop before shipping the goods to be repaired to Atop. When in normal use, a sold product shall be replaced with a new one within 3 months after purchase. The shipping cost from the customer to Atop will be reimbursed by Atop.

After 3 months and still within the warranty period, it is up to Atop whether to replace the unit with a new one; normally, as long as a product is under warranty, all parts and labor are free of charge to the customers.

After the warranty period, the customer shall cover the cost for parts and labor. Three months after purchase, the shipping cost from the customer to Atop will not be reimbursed, but the shipping cost from Atop to the customer will be paid by Atop.

Limited Liability

Atop shall not be held responsible for any consequential losses from using Atop's product.

Warranty Period

Product Categories	Warranty
Ethernet Switches	
Wireless	
Serial Device Servers	5 Years
Modbus Gateways	
Embedded Device Servers	
DIN-Rail Power Supplies	3 Years
Power Adaptors	
Antennas	1 Year
Other Accessories	

The warranty certification will not be effective until an authorized stamp issued by Atop's overseas agents.

ATOP Customer Services and Supports

1. Please contact your local dealers or Atop Technical Support Center at the following numbers.
   + 886-3-550-8137 (Atop Taiwan)
   + 86-21-6495-6232 (Atop China)
2. Please report the defected problems via Atop's Web site or E-mail account
   Web Site : www.atop.com.tw, e-mail : service@atop.com.tw
   Web Site : www.atop.com.cn, e-mail : service@atop.com.cn

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