

HNT-1401-MB-X1 | 1-Port Industrial Modbus TCP/RTU/ASCII Gateway



FEATURE HIGHLIGHTS

- 1 x software-selectable RS-232/485/422 port
- 1 x 10/100Mbps RJ45 Fast Ethernet port
- Supports TCP server/client, UDP, Virtual COM and Tunneling
- Modbus TCP/RTU/ASCII
- Configuration via Web Server, Telnet, and Windows Utility
- Upgradable firmware via Ethernet from a remote-PC
- Rugged metal casing; industrial EMC protection
- Redundant dual DC power inputs for non-stop operation
- Optional DIN-Rail mounting

DESCRIPTION

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. Industrial EMC protection and wide temperature operation capability make HNT-1401-MB ready for every mission.

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.

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.

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SPECIFICATIONS

Network Interface

Ethernet Port	1 x 10/100BASE-T(X) RJ-45
Compliance	IEEE 802.3 for 10BASE-T IEEE 802.3u for 100BASE-T(X)

Serial Interface

Connector	9-Pin D-Sub9 connector(Male, -DB version) or 5-Pin Terminal block (-TB version)
Ports	1
Mode	RS-232/RS-485(2 and 4 wire)/RS-422, software selectable
Baud Rate	1200~230,400 bps (RS-485 4-wire allows up to 921,600 bps)
Parity	None, Odd, Even, Space, Mark
Data Bits	7,8
Stop Bits	1,2
Flow Control	None, Xon/Xoff, RTS/CTS (RS-232 only)

Power Characteristics

Connector	3-Pin 5.08mm Lockable Terminal Block and DC Jack for redundancy
Input Voltage	3-Pin 5.08mm Lockable Terminal Block: 9-30VDC; DC Jack 5VDC
Power Consumption	<9W
Power Redundancy	Yes
Reverse Polarity Protection	Yes

Mechanicals

Dimensions(W x D x H)	65mm x 78mm x 28mm (without wall-mount part) 88.5 x 78.3 x 27.8mm (with wall-mount part)
Installation	Wall-Mount or DIN-Rail (optional kit)
Reset Button	Yes
Weight	185g

Environmental Limits

Operating Temperature	-40°C ~ 70°C (-40°F ~ 158°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Ambient Relative Humidity	5 ~ 95% RH, (non-condensing)

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SPECIFICATIONS

Software

Protocols	TCP, IPv4, UDP, DHCP Client, HTTP, HTTPS, Telnet, ARP, SNMPv1,v2c,v3
Configuration	Management Utility, Web UI, Telnet, CLI
VirtualCOM	Windows/Linux redirection software
Modbus	TCP/RTU/ASCII
TCP Client	Single destination or VirtualCOM
TCP Server	4 Connections; VirtualCOM or reverse Telnet
UDP	Up to 4 Ranges IP

Approvals

safety	EN 60950-1 / EN62368-1
EMC	FCC Part 15, Subpart B, Class A EN 55032, EN61000-6-4
	EN 61000-3-2
	EN 61000-3-3
	EN 55024, EN61000-6-2

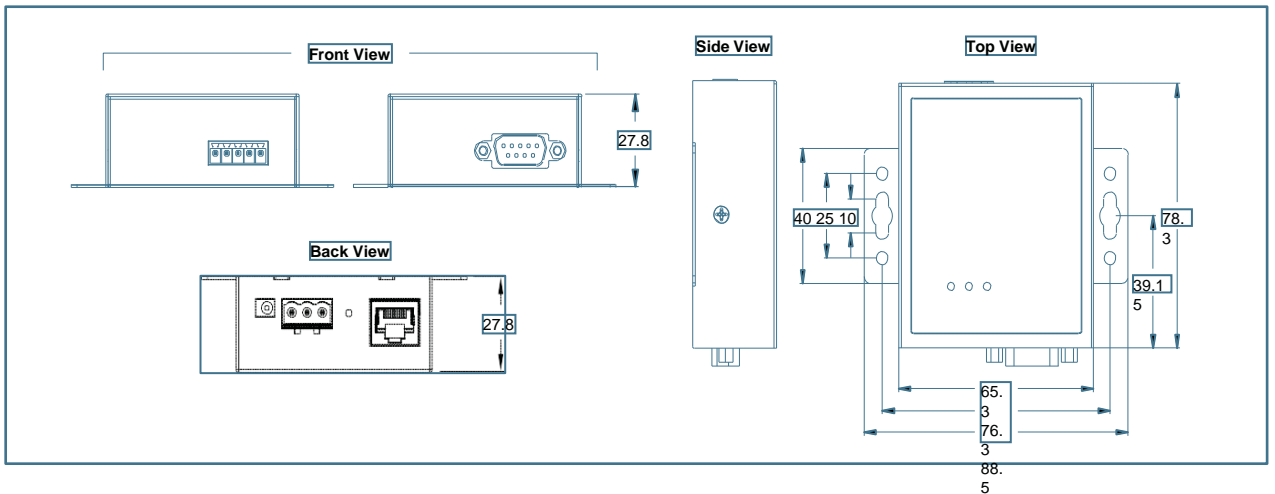
Test	Item	Value	Level	
IEC 61000-4-2	ESD	Contact Discharge	±4KV	3
		Air Discharge	±8KV	3
IEC 61000-4-3	RS	80-1000MHz	10(V/m)	3
IEC 61000-4-4	EFT	AC Power Port	±2.0KV	3
		DC Power Port	±1.0KV	3
		Signal Port	±1.0KV	3
IEC 61000-4-5	Surge	AC Power Port	Line-to Line±1.0KV	3
		AC Power Port	Line-to Earth±2.0KV	3
		Signal Port	Line-to Earth±1.0KV	3
IEC 61000-4-6	CS	0.15-80MHz	10 Vrms	3
IEC 61000-4-8	PFMF	Enclosure	10A/m	3
IEC 61000-4-11	DIP	AC Power Port	1. >95%,Reduction,0.5 period	-
			2. 30%, Reduction,25 period	
			3. >95%,Reduction, 250 period	

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SPECIFICATIONS

Shock	MIL-STD-810F Method 516.5
Drop	MIL-STD-810F Method 516.5
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2
RoHS	Yes
MTBF	25.29 years according to MIL-HDBK-217F, 25 degrees C
Warranty	5 years

DIMENSIONS



ORDERING INFORMATION

Model name	Description
HNT-1401-MB-X1(DB)	1-Port Modbus TCP/RTU Gateway, RS-232/422/485, DB9(M)
HNT-1401-MB-X1(TB)	1-Port Modbus TCP/RTU Gateway, RS-232/422/485, Terminal Block