

Interface port with various applications

- 1) Ethernet Port: Modbus TP/IP, Ethernet I/P, Web Interface
- 2) Terminals 1-5: RS485, 2wire, Modbus
- 3) Terminals 6-10: Input Power, Relay Output

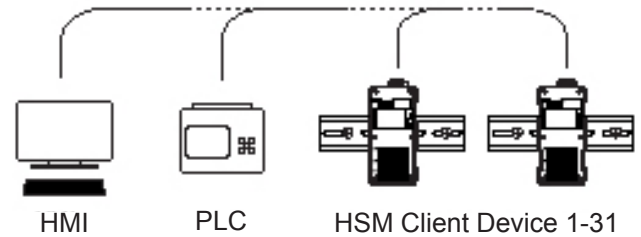
CONNECT COMMUNICATION WIRING: 2 WIRE RS-485 MODBUS RTU (2 WIRE)

The only serial protocol that is recognized by HSM is 2 wire RS-485 Modbus. The device acts as a slave on the network.

TERMINALS 1-5				
Terminal Number	Name	Function	Wire Gauge	Wire Type
1	V-	Input Voltage Negative	22	Unshielded (<3m)
2	V+	Input Voltage Positive		Shielded (>3m)
3	Rx-	Inverting, 2-wire, RS-485		Shielded twisted pair
4	Tx+	Non-Inverting, 2-wire, RS-485		
5	Shd	Shielding of communication pair		Unshielded (<3m)
6	V-	Input Voltage Negative		
7	V+	Input Voltage Positive		
8	PE	Chassis Grounding		
9	COM	Relay: Common Terminal		Shielded (>3m)
10	NO	Relay: Normally Open Terminal		

RS-485 MODBUS RTU NETWORK TOPOLOGY

This topology is usually referred to as “ring topology” in that each unit is connected sequentially along a datusbus. The flexibility of the system allows for one datusbus to communicate with up to 31 units. If more than 31 units are required, an additional datusbus must be added.



MODBUS RTU SETTINGS AND PARAMETERS

CONFIGURATION WEB PAGE SETTINGS		
Parameter	Default Value	Range/Options
Client ID	1	1 - 31
MODBUS PORT	502	0 - 9999
Baud Rate	19200	9600, 19200, 38400, Baud

MODBUS RTU PARAMETERS		
Parameter	Default Value	Range/Options
Baud Rate	19200 Baud	9600, 19200, 38400 Baud
Data Bits	8	N/A
Parity	None	
Stop Bits	1	
Max # of Registers per Query	N/A	32
Max Polling Rate	3 Seconds	N/A

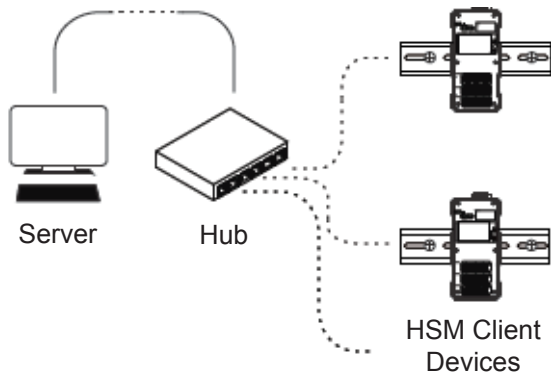
*Modbus TCP/IP and Ethernet I/P
Network Settings continued on back*

WIRING MODBUS TCP/IP

Shielded twisted-pair 10/100 Base-T cables (Cat5) with RJ45 connectors are supported. Connect cable to the Ethernet port on the device should either be Modbus TCP/IP or Ethernet I/P protocols be selected for real-time communication with the device.

MODBUS TCP/IP AND ETHERNET I/P NETWORK TOPOLOGY

This topology is usually referred to as a “star”. Each unit is typically wired directly to the server through a network switch.



MODBUS TCP/IP AND ETHERNET I/P NETWORK SETTINGS

NETWORK CONFIGURATION WEB PAGE SETTINGS		
Parameter	Default Value	Range/Options
IP Address	192.168.1.50	XXX.XXX.XXX.XXX (XXX is 0 - 255)
Gateway	192.168.1.2	XXX.XXX.XXX.XXX (XXX is 0 - 255)
Subnet Mask	255.255.255.0	XXX.XXX.XXX.XXX (XXX is 0 - 255)

MODBUS TCP/IP PARAMETERS		
Parameter	Default Value	Range/Options
IP Address	192.168.1.50	XXX.XXX.XXX.XXX (XXX is 0 - 255)
Port	502	1 - 9999