

*Babel Buster SPX*  
MODBUS SNMP  
NETWORK GATEWAY

  
CONTROL SOLUTIONS MINNESOTA

# Babel Buster<sup>®</sup> SPX Modbus Gateway



## *Pick from Two Versions of Babel Buster SPX:*

- *Register Re-Mapping Gateway (Most Popular, Connects Modbus and SNMP)*
- *Transparent TCP/RTU Gateway (Simple Pass-Through)*

**Babel Buster SPX**, standard version, is most commonly used to connect Modbus devices to SNMP or vice versa. Data from Modbus RTU or Modbus TCP devices can be provided via a generic SNMP MIB. The SPX automatically polls the Modbus devices periodically, stores a copy of registers mapped for polling, and provides that data when requested using SNMP Get. Data may also be written to Modbus devices using SNMP Set.

The Babel Buster SPX may also be configured as an SNMP client. The SPX will generate SNMP Get requests to read data from SNMP devices, and store the data in local registers to be retrieved via Modbus. The process may also go the other direction, allowing Modbus to control SNMP devices.

The Babel Buster SPX can be Modbus TCP client and server (master and slave) at the same time. The Babel Buster SPX can be Modbus RTU master or slave (one or the other, user selectable). The SPX can be SNMP client and server, and will generate SNMP Traps based on user set thresholds, sent to user provided destinations.

**Babel Buster SPX-GW**, transparent pass-through gateway, is used when you simply want to convert Modbus RTU to Modbus TCP or vice versa. Access multiple RTU devices from a single TCP port, or access multiple TCP devices from a single RTU port.

RTU Devices on a TCP Network: Mapping multiple RTU devices to a single TCP IP address means the TCP port looks like a Modbus slave while the RTU port looks like a Modbus master to multiple slaves on the EIA485 link. The TCP master must provide valid unit numbers to select the different RTU devices.

TCP Devices on an RTU Network: Mapping multiple TCP devices to multiple Modbus RTU addresses means the RTU side acts as a Modbus slave while the TCP side acts as Modbus master connecting to multiple Modbus TCP slaves.

If register renumbering is needed, then the standard SPX must be used. The SPX-GW does not interpret or process any data or register numbers. The SPX-GW only processes packet source and destination.



# Babel Buster SPX



Connect Modbus to SNMP using Babel Buster SPX. Access SNMP devices from Modbus RTU or TCP. Access Modbus devices from SNMP. Data centers find the Babel Buster SPX very useful for monitoring “industrial” equipment in the data center that does not have native SNMP support. System integrators find the Babel Buster SPX useful when programming PLCs to control equipment in the data center where Modbus access to SNMP data is needed.

## Babel Buster SPX Specifications

- Modbus RTU Master or Slave
- Modbus TCP Client and Server
- SNMP v1, v2 Client and Server\*
- SNMP v2c Traps, User Defined Thresholds\*
- Modbus RTU RS-485 (only)
- Modbus TCP over Ethernet 10/100BaseT
- 1000 16-bit registers\*
- 500 32-bit floating point registers\*
- 300 SNMP OID variables\*
- 240 Modbus RTU Devices Supported
- 50 Modbus TCP Devices Supported\*\*
- Web UI for Configuration and Diagnostics
- User HTML Wrapper Support\*
- DHCP or Static IP address
- Virtual Device Emulation\*
- Powered by 9 to 30VDC @ 0.37A to 0.11A
- Operating temperature -40°C to +85°C
- Humidity 5% to 90% non-condensing
- FCC Class A, CE Mark

\* Applies to SPX only, not applicable for SPX-GW.  
 \*\* TCP Device count is 20 for SPX-GW.



RTU Serial Port | IP Network | System

Data | Setup

Local Device | RTU Read Map | RTU Write Map

Read remote registers into local registers. This page creates a map entry that reads data from one or more remote Modbus RTU serial devices for processing here. Click on map number to see more detail and insert/delete rules.

Showing 1 to 5 of 5 Update < Prev Next >

Map #	Remote Type	Remote Register Format	Remote Register #	Remote Unit #	Scale	Local Register #	Name
1	Holding Register	Float	121	3	1.000000	1001	Volts (V)
2	Holding Register	Float	123	3	1.000000	1003	Amps (A)
3	Holding Register	Float	125	3	1.000000	1005	Hertz (Hz)
4	Holding Register	Float	127	3	1.000000	1007	Watts (W)
5	None	Integer	0	0	0.000000	0	



Gateway Settings | Local Settings

TCP Device Map | Serial Port | Diagnostics

This page sets up mapping of RTU slave addresses to Modbus TCP IP addresses that are used when this gateway is set to be a Modbus RTU slave. In this mode, the gateway can map multiple Modbus TCP devices to RTU addresses.

Update

Socket	First Slave Address Incoming	Last Slave Address Incoming	IP Address	First Slave Address Outgoing	Connection Status
1	1	1	192.168.1.101	1	0
2	2	2	192.168.1.102	2	0
3	3	3	192.168.1.103	3	0
4	4	4	192.168.1.104	4	0
5	0	0	0.0.0.0	0	-

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