Put ZigBee® devices on a Modbus® TCP or Modbus RTU network!

Control Solutions' Babel Buster® BB2-6040

is a Modbus client/server device that functions as a ZigBee Coordinator and gateway. The ZigBee capabilities are identical to the BB2-7040 BACnet/ZigBee gateway. After setting up the appropriate mappings in the BB2-6040, data from ZigBee sensors will appear as Modbus registers via Modbus TCP or Modbus RTU. Data written to Modbus registers can also be propagated to ZigBee actuators by the BB2-6040.

The BB2-6040 operates primarily in Listen mode, simply waiting for ZigBee devices to report in. When the ZigBee devices do report in, the BB2-6040 searches its known device list and data maps to see if the reported data should be saved as a local Modbus register.

The collection of Modbus registers found in the BB2-6040 will maintain the most recently received ZigBee data. Other Modbus masters may query the BB2-6040 server to obtain that most recent data accessed as a holding register.

Modbus masters may write to any of the BB2-6040's holding registers to send data to a ZigBee device when mapped for writing. The BB2-6040 will transmit to the ZigBee device, and a properly configured ZigBee device will receive the transmission at the end of its sleep period.

The BB2-6040 may also function as a master, and will use holding register writes to share data with Modbus slaves. The BB2-6040 therefore has the ability to transfer data between ZigBee devices and other Modbus devices that operate as a slave only.

Access to ZigBee devices based on the Digi/MaxStream RF modules can be configured using fill-in-the-blank templates. Raw ZigBee access is supported for any other variation of device. You can use the BB2-6040's built in Script Basic to program more complex ZigBee related algorithms if you wish. Access to the ZigBee port is handled via Basic's file I/O statements (e.g. print #1).

The BB2-6040 firmware is field upgradeable. As new features and preconfigured devices are added to the library, you will be able to add these features with a simple file upload to upgrade. Control Solutions does not charge extra for upgrades, even when upgrading to add features.
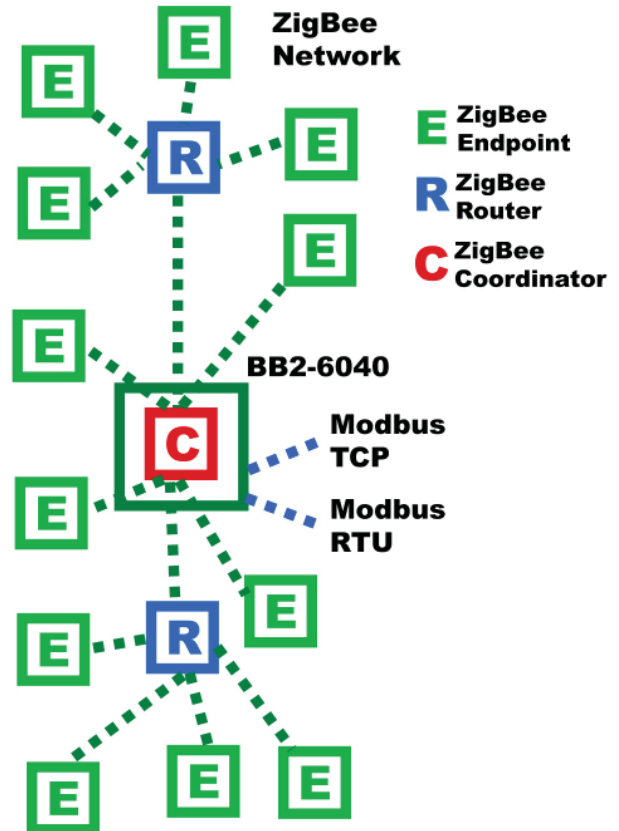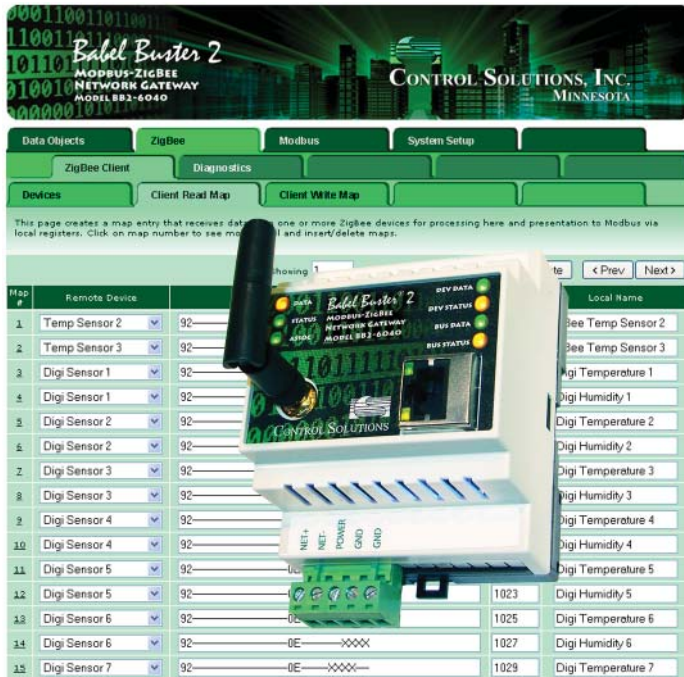
Visit www.csimn.com for more details about the BB2-6040. Watch Flash videos or browse the online user guide.

ZigBee®
Member

Built-In Web Server
for Configuration and Diagnostics

Typical Network

ZigBee Network

E ZigBee Endpoint
R ZigBee Router
C ZigBee Coordinator

BB2-6040

Modbus TCP

Modbus RTU

FEATURES

- Read/Write ZigBee devices via Modbus registers
- Functions as ZigBee Coordinator (Router optional)
- Integer and floating point register support
- Virtual Modbus device register remapping
- Modbus RTU RS-485 master and slave
- Modbus TCP client and server
- Bidirectional communication between Modbus and ZigBee
- Supports up to 100 ZigBee devices, up to 300 data points
- User programmable with Script Basic
- Embedded web server supports User HTML web pages
- Hardened EIA-485 transceiver for RTU port
- Powered by 10-30VDC or 12-24VAC 50/60 Hz
- Power Consumption: 0.2A @ 24VDC
- Transmit power: 50mW North America, 10mW Europe
- DIN rail mounting, 100mm H x 70mm W x 60mm D
    (excluding antenna - RPSMA connector)
- Pluggable screw terminal blocks
- Operating temperature -40°C to +85°C
- Humidity 5% to 90%
- FCC, CE Mark

Visit our web site for
- *Full details*
- *User Guides & Software Downloads*
- *Pricing & On-Line Ordering*

www.csimn.com

CONTROL SOLUTIONS, INC.