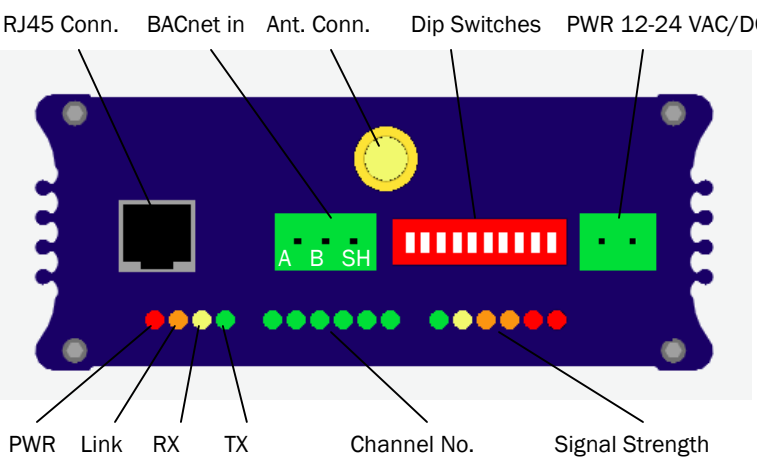
WBT900

The WBT900 is a device designed to transport BACnet MSTP communication data over short to extended ranges using the 900 MHz frequency (902-928). The WBT900 is designed to be plug-and-play, requiring no special programming tools. Using a simple software tool (provided) radios can be addressed to one another in the field. See below for installation instructions and configuration.

Antenna	RPSMA Connector
PWR	Power LED
Link	Link between Server/Client
RX	Receive Indicator
TX	Transmit indicator
Dip Switch	WBT900 settings (see installation instructions)
Channel	Channel Indicator
Signal Str.	Signal Quality Indicator—Red to Green (0-100%)
BACnet in	Three wire BACnet termination
PWR	12-24VAC/DC *** see Warning**
GND	12-24VAC/DC *** see Warning**



Operating Voltage: 12-24 VAC/DC (not polarity sensitive)
Power Consumption at Max Power: 200mA @ 12VAC/DC

**** WARNING: If using AC power option, 24 VAC isolation transformer must be used! Ensure neither of the two secondaries are bonded.***

INSTALLATION INSTRUCTIONS:

1. Connect BACnet MSTP bus as labeled in the above diagram. (A, B, and Shield)
2. Connect 12-24 VAC/DC power as labeled in the above diagram.
3. Red power Led should light up.
4. Adjust dip switch for desired operation. See Dip Switch Definitions on back.
5. Perform a *local download* on the remote BACnet site.
6. Verify the Rf network communication with the Signal Strength, TX, RX, and Link led indicators.
7. Lastly, perform a commission at the base station site to establish the link with the remote location.

Note: As with any Rf network, plan ahead for antenna location and placement. It is the intention of AIC Wireless to provide a reliable wireless communication device for existing BACnet MSTP networks. However, in some conditions, reliability is determined largely by correct antenna placement, which is the responsibility of the installer. Using good judgment in antenna placement will help decrease service related issues and increase reliability. This product is NOT TO BE USED in situations where life safety issues may arise. AIC Wireless makes no claims, expressed or implied, of the products usefulness with regard to specific applications. Determination of the product's suitability for an application is the sole responsibility of the purchasing parties. In any installation application, ensure devices are properly protected from the elements by installing in appropriate enclosure. Additional surge protection devices may be necessary to protect from lightning/power surges.

See reverse side for adding clients

Designed and Engineered by AIC, LLC/AIC Wireless
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Dip Switch Definitions For All W*T Products by AIC Wireless

SW1 On (Channel 1 On) SW1 Off (Channel 1 Off)

SW2 On (Channel 2 On) SW2 Off (Channel 2 Off)

SW3 On (Channel 4 On) SW3 Off (Channel 4 Off)

SW4 On (Channel 8 On) SW4 Off (Channel 8 Off)

SW5 Leave in Off Position

SW6 Leave in Off Position

SW7 and SW8 must work in combination.

SW7 On and SW8 Off Ethernet port communication to the radio. Used for programming of the radio server or client radio relationship.

SW7 Off and SW8 Off No function. DO NOT OPERATE IN THIS MODE.

SW7 On and SW8 On Normal operating mode between the device server and the radio.

SW7 Off and SW8 On Ethernet port communication to the device server. Used for programming the device server based on the RS485 baud rate.

SW9 FACTORY USE ONLY, leave in Off position

SW10 On Server Mode SW10 Off Client Mode

There are 12 selectable channels available by combining SW1 through SW4. (Example SW2 On [CH2} and SW3 On [CH4] = Channel 6)

900 MHz Channel Table

Channel	Dip Switch Setting	Center Frequency
1	1 On/2 Off/3 Off/4 Off	903.12500 MHz
2	1 Off/2 On/3 Off/4 Off	905.20833 MHz
3	1 On/2 On/3 Off/4 Off	907.29167 MHz
4	1 Off/2 Off/3 On/4 Off	909.37500 MHz
5	1 On/2 Off/3 On/4 Off	911.45833 MHz
6	1 Off/2 On/3 On/4 Off	913.54167 MHz
7	1 On/2 On/3 On/4 Off	915.62500 MHz
8	1 Off/2 Off/3 Off/4 On	917.70833 MHz
9	1 On/2 Off/3 Off/4 On	919.79167 MHz
10	1 Off/2 On/3 Off/4 On	921.87500 MHz
11	1 On/2 On/3 Off/4 On	923.95833 MHz
12	1 Off/2 Off/3 On/4 On	926.04167 MHz

Adding new Clients to a Server:

1. Disconnect power to the server unit and verify dipswitch 7 on both Client and Server are in the on position.
2. Connect patch style (Ethernet) cable between Server and Client radios.
3. Power on the Client radio **then** power on the Server radio. The signal quality LEDs will change from sequential flashing to a steady pulse on the green signal quality LED, indicating the key exchange (program) has occurred.
4. Cycle power on all radios.
5. Repeat Steps 1-4 for additional Client radios.

For Support Information, contact AIC Wireless at 229-776-2510, or e-mail support@aic-wireless.com.
For Sales Information, contact AIC Wireless at 229-776-2510, or e-mail sales@aic-wireless.com.

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IC:5303A-AW900M

This device complies with Part 15 of the FCC rules. Operation is subject