



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	RJ45 Conn.	BACnet in	Ant. Conn.	Dip Switches	PWR 12-24 VAC/DC
PWR	Power LED					
Link	Link between Server/Client					
RX	Receive Indicator					
ТΧ	Transmit indicator					
Dip Switch	WBT900 settings (see installation instructions)					
Channel	Channel Indicator	7				
Signal Str.	Signal Quality Indicator—Red to Green (0-100%)					
BACnet in	Three wire BACnet termination		$/ \setminus$			
PWR	12-24VAC/DC * see Warning	PWR Link	RX TX	Cha	nnel No.	Signal Strength
GND	12-24VAC/DC * see Warning	Operati	ng Voltage: 12	2-24 VAC/DC (r	not polarity sensiti	ive)
		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.
- 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.

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 Ethernet port communication to the device server. Used for programming the device server based on the RS485 baud rate.

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

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

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

Device Server Configuration/Programming:

In the event it is necessary to change factory settings for the BACnet MSTP device network, please refer to the WBT900 Device Sever Programming Guide.

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

FCC ID: R4N-AW900M IC:5303A-AW900M

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference; (2) This device must accept any interference received, including interference that may cause undesired operation.