

Bentley WiNET Tag User Guide

FAS1503
DOC1036 Revision 0



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Revision History

| Revision | Date | By | Description |
|----------|----------|-----|-----------------|
| 0 | 01/25/11 | MJB | Initial Release |

Box Contents

- 1 WiNET Radio Tag
- 2 Coin Cell Batteries (CR2430 - Optional)
- 1 Detachable Cable
- 1 User's Guide

Overview

The FAS1503 WiNet Tag, when used as a component of the WiNET wireless monitoring solution, relays radio transmissions to both the WiNET Hub (FASxxxx) and the WiNET Gateway (FASxxxx) (see Figure 1).

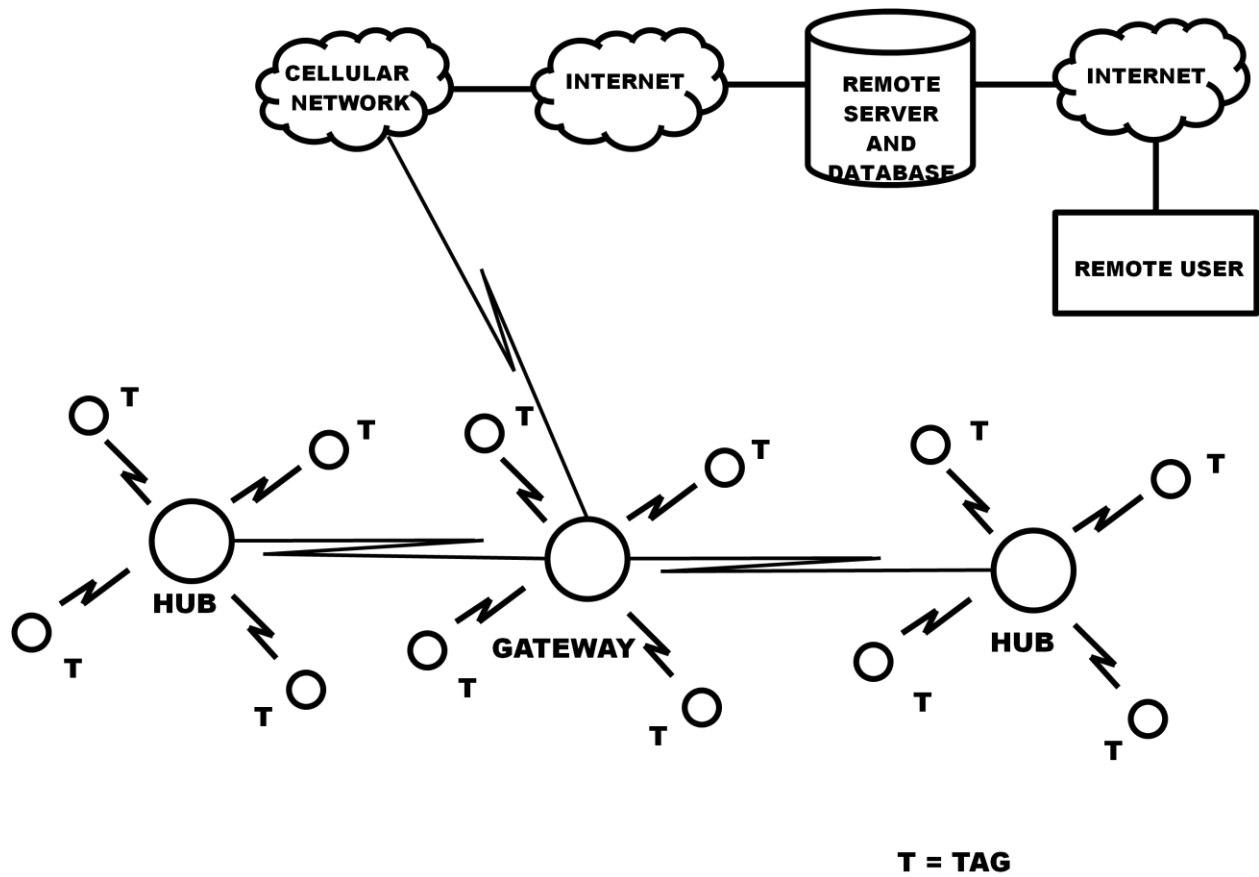


Figure 1. – WiNET Network Topology

Installing the Batteries

This procedure will require a small Phillips screwdriver.

Step 1 – Open Tag Enclosure

With a small Phillips screwdriver, remove the two screws located on the front of the Tag enclosure (see Figure 2). With the screw removed, separate the bottom half of the Tag enclosure from the top half. The Tag will be secured inside the Tag enclosure.

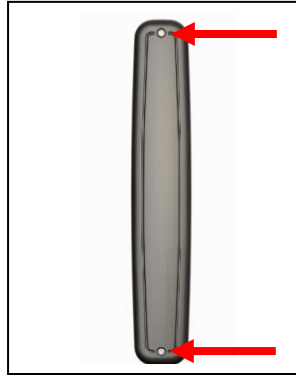


Figure 2 – Location of Screws

Step 2 – Removing Battery Insulators (Batteries preinstalled)

Depending on the configuration ordered, batteries may be preinstalled in the Tag. To prevent power drainage during shipping, insulators may be inserted between the battery contacts and the battery (see figure 3). Remove the battery insulators by gently pulling the insulation away from the battery.

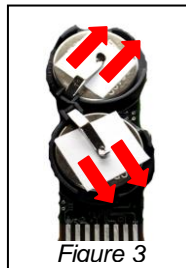


Figure 3

Step 3 – Installing New Batteries (Batteries not preinstalled)

Depending on the configuration ordered, batteries may not be preinstalled in the Tag. Insert a coin cell battery (CR2430) into the battery holder with the positive (+) side facing toward the contact (see figure 4). Repeat the procedure for the remaining battery holder.



Figure 4

Installing the Tag

This procedure will require no tools.

Step 1 – Tag Mounting Location

In a dry indoor environment, locate an area on a wall next to the dispenser where the Tag will be mounted, preferably to the immediate right or left of the dispenser. Make sure the wall's surface is clean and free of dirt, dust or grease.

NOTE: The Tag is a radio and therefore should not be mounted on or near large metal objects. Doing so may degrade its performance.

Step 2 – Attach the Cable to the Tag

Insert one end of the detachable cable into the port on the back of the Tag (see Figure 5).



Figure 5

Step 3 – Fold Cable

Make a 90° fold in the cable at the recessed portion of the back of the enclosure (see Figure 6).

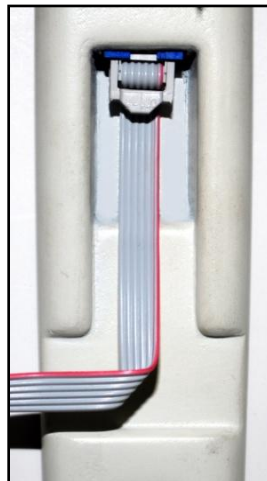


Figure 6

If the Tag will be mounted on the left side of the dispenser, fold the cable to the left. If the Tag will be mounted on the right side of the dispenser, fold the cable to the right.

Step 4 – Mount the Tag to the Wall

Unpeel the protective layer from the two pieces of double sided tape that are located on the back of the Tag. Align the top of the Tag with the top of the dispenser and press the Tag firmly against the wall.

Connecting the Tag to the Dispenser

Step 1 – Remove Touch-free Dispenser Gearbox

Open the cover of the dispenser and remove the touch-free gearbox. To remove the touch-free gearbox, depress the retention clip located at the top of the touch-free gearbox to unlatch and pivot forward to remove.

Step 2 – Install Cable

Locate the 6-pin port on the back of the touch-free gearbox and insert the free end of the detachable cable into the port (see figure 7).

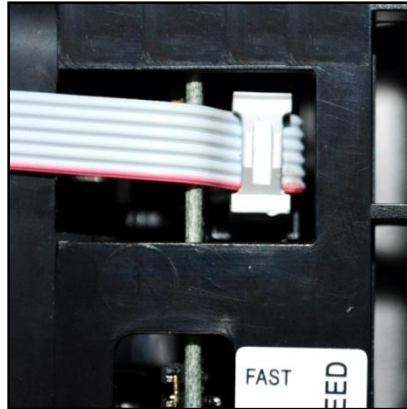


Figure 7

Insure that the two raised tabs on the top of the cable end are inserted into the corresponding opening in the 6-pin port on the back of the touch-free gearbox (see Figure 8).

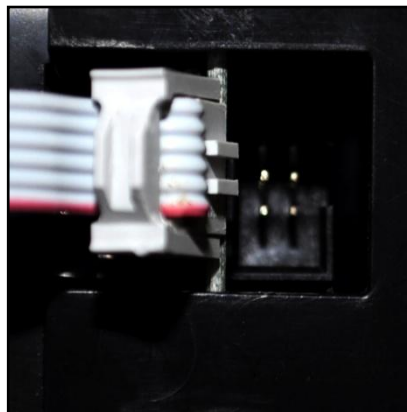


Figure 8

Step 3 – Install Gearbox back into the Dispenser

To reinstall the touch-free gearbox, place the bottom 2 pivot points into the chassis base and pivot the top towards the chassis until the touch-free gearbox latches and clicks into place. Close the cover. The finished installation should look like Figure 9 below.



Figure 9 – Complete Installation

Testing the Tag

This procedure will require a dispenser with the Tag installed, a hub (optional), a USB to RS485 Network Interface Kit (KIT1101-00), and a gateway attached to a computer running a Terminal Emulation program.

Step 1 – Setting up Test Equipment

For instruction on how to install and configure the USB to RS485 Network Interface Kit, please refer to DOC1000. Insert the RJ-11 connector, located on the end of the serial cable, into the RS-485 port on the back of the Gateway as shown in figure 10. The other end of the serial cable will be inserted into the RS-485 Data port on the USB to RS485 Network Interface adapter.



Figure 10 – Location of serial connection in back of Gateway

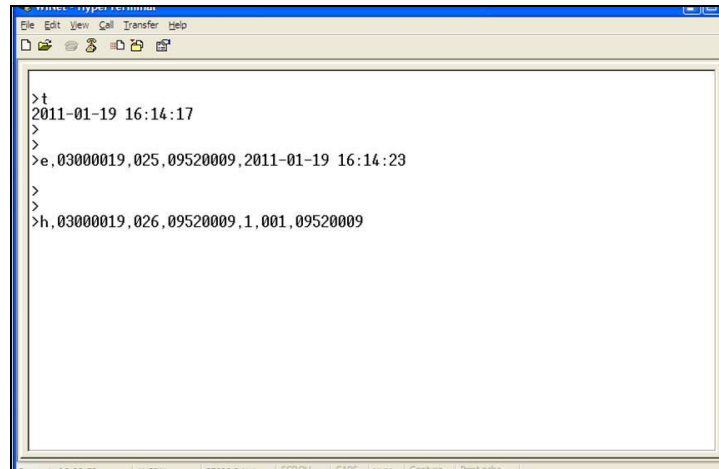
Insert the USB cable into a USB port on computer. The other end of the USB cable will be inserted into the RS-485 Data port on the USB to RS485 Network Interface adapter.

Step 2 – Configuring Terminal Emulation Software (HyperTerminal)

For instructions on how to configure Terminal Emulation Software (HyperTerminal), please refer to DOC1038 (WiNET Gateway User Guide). With communications established between Gateway and computer, start a terminal session. Press **G** [enter] until the Gateway events are ON. Press **M** [enter] until the Monitor Events are OFF.

Step 3 – Conducting the Test

With the Gateway properly connected to computer through the USB to RS485 Network Interface adapter, activate the dispenser. Successful events will appear on terminal session as seen in figure 11. Test the connection between the Gateway and the Computer by pressing the letter “t” [enter]. You will see the current date time group that is configured on the Gateway.



```
>t
2011-01-19 16:14:17
>
>
>e,03000019,025,09520009,2011-01-19 16:14:23
>
>
>h,03000019,026,09520009,1,001,09520009
```

Figure 11 – Successful Tag Test result

A dispense event occurs when a dispenser, equipped with a tag, is activated. Successful dispense events will appear on screen preceded by a lower case letter **e** and will look like this:

```
e,03000019,025,09520009,2011-01-19 16:14:23
```

The fields are defined as follows:

- e = Dispense event
- 03000019 = Device identification number (unique for each device)
- 025 = Nonce (Unique identifier - increments by 1 each event)
- 09520009 = First Responder ID (FRID)
- 2011-01-19 = Date of event
- 16:14:23 = Time of event

A heartbeat occurs at regularly predetermined intervals and is designed to announce to the gateway that the device is online and operational. Successful heartbeats will appear on screen preceded by a lower case letter **h** and will look like this:

```
h,03000019,026,09520009,1,001,09520009
```

The fields are defined as follows:

- h = Heartbeat
- 03000019 = Device identification number (unique for each device)
- 026 = Nonce (Unique identifier - increments by 1 each event)
- 09520009 = First Responder ID (FRID)
- 1 = Device Type (1=Tag; 2=Hub)
- 001 = FRQ (First Responder Link Quality)

09520009 = Gateway assigned to that network

Maintenance

Cleaning

The exterior can be cleaned with a NON abrasive detergent and a NON abrasive damp (not wet) sponge or cloth. The Tag is splash resistant but not water proof.

Changing the Batteries

This procedure will require a small Phillips screwdriver and two (2) coin cell batteries (CR2430).

Step 1 – Open Tag Enclosure

With a small Phillips screwdriver, remove the two screws located on the front of the Tag (see Figure 2). With the screw removed, separate the bottom half of the Tag enclosure from the top half. The Tag will be secured inside the Tag enclosure.

Step 2 – Replacing Old Batteries

Remove the old batteries by carefully sliding them out of the battery holders. Inset a coin cell battery (CR2430) into each of the battery holders with the positive (+) side facing toward the contact (see figure 4).

Certification and Safety Approvals

FCC

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING: Changes or modifications not expressly approved by UltraClenz, LLC could void the user's authority to operate the equipment.

Regulations

"Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication."

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

"This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Warranty

This device is warranted against defective materials and workmanship for one year from the date of delivery.

Equipment covered by this warranty will be repaired or replaced in the United States and Canada, WITHOUT CHARGE, except for shipping and handling, by our Factory Service Center.

When returning equipment for warranty service, you must first call your distributor's **Warranty Service Department** for your Return Merchandise Authorization Number (RMA), the RMA must be on your return label, also the shipping charges must be pre-paid and a copy of your receipt must be enclosed.

This warranty covers all defects incurred from normal use of the equipment and does not apply in the following cases:

- a. Loss or damage to the equipment due to abuse, mishandling, accident or failure to follow mounting instructions.
- b. If the equipment is defective as a result of leaking batteries.
- c. If the equipment has been serviced or modified by someone other than our authorized agents.

THE AFOREMENTIONED IS IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL THE VENDOR BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES OR LIABILITY, TRANSPORTATION, INSTALLATION OR SUBSTITUTION COSTS, DELAYS, OR FOR ANY OTHER DAMAGES, COSTS, OR EXPENSES INCURRED, IRRESPECTIVE OF HOW THEY OCCUR. THIS WARRANTY SHALL NOT EXTEND TO ANY OTHER PERSON OTHER THAN THE ORIGINAL PURCHASER OF THIS EQUIPMENT OR THE PERSON FOR WHOM IT WAS PURCHASED AS A GIFT.

This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state. This warranty is given with respect to equipment purchased in the United States.

This warranty is for the touch-free soap dispenser only, and excludes any representation or warranty with regard to any soap, lotion, solution or other liquid used in the dispenser. Use of improperly formulated soaps, lotions, solutions or other liquids could result, amongst other things, in damage to the dispenser, and/or leakage, which in turn could create conditions leading to personal injury. In no event shall the vendor be liable for any damage or injury caused by any soaps, lotions, solutions or other liquids used in the dispenser.

Patent Pending