

Application Guide: View 3 and View 4 tags



Components

Button

Every View 3 & View 4 tag has one button. Multiple button interactions are supported:

- Single button press – causes tag to announce
- 3 button presses within 1 sec – displays identification page
- Press & hold for 10 sec – displays diagnostic page
- Press & hold for 20 sec – resets the tag

LED

Every View 3 & View 4 tag has one Green LED on the front face of the tag. The LED can be configured to operate in multiple ways. By default, View tags:

- Blink on each RF transmission
- Blink on each button press (default behavior)
- Blink on each RFID Op-code execution
- Blink 10 times at twice a second (2 Hz)
- Blink at 2 Hz until the button is pressed (will time out after 5 hours)

Note: LED use will impact battery life.

Battery

Batteries are primary lithium metal pouches, replaceable only by a trained technician.

Expected battery life:

View 3 – 3 years at 20°C

View 4 – 5 years at 20°C

Battery life is dependent on configuration and use. ➡

**Sleep Dwell: Refers to how long the tag “sleeps” between Announces. In this case, the tag will automatically send an Announce every 5 minutes, regardless of whether it has been triggered by an RF reader or a button press. (See the alarm clock in the illustration on page 2.)*

Awake Dwell: Specifies how long the tag stays awake when it Announces.

Typical battery life is defined by the following use:

- 5 minute Sleep Dwell*
- 500 ms Awake Dwell*
- 100 ms ACK Listen Duration
- 10 screen draws per day
- 10 Template Data writes per day
- Beacon period of 15 seconds-no Extended Beacons
- Tx Power set to 0 dBm
- Announce Attempts of 2
- Announce Retry Interval of 1 second
- LED Control of 0
- No storage time before initial use

Special Pages

Identification Page

- Displayed by pressing button 3 times or commanding page -1(255)
- Shows tag's UID and EPC
- Eliminates need for paper label



Diagnostic Page

- Displayed by pressing & holding button for 10 seconds or commanding page 0.
- Displays UID along with

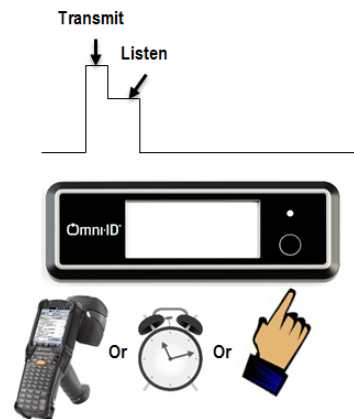
HW vers	FW vers	Announces	Screen draws
Resets	Radio Time	OpCode exec	Channel
Sleep Dwell	Awake dwell	ACK Listen	Battery Level



Transmissions

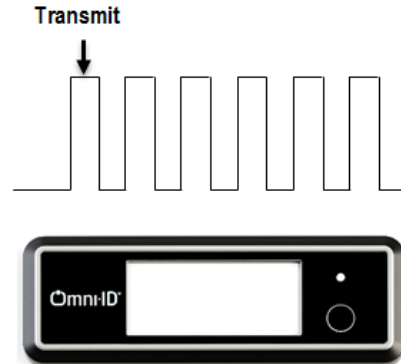
Announces

- Announces are transmissions which provide tag status information to the system and indicate that a tag shall enter receive mode directly after finishing transmission of the Announce.
- Due to their subsequent listening operation, Announces consume significant amounts of power.
- The frequency of announces must be limited to the achieve tag life.



Beacon

- Beacons are transmissions which provide tag status information, but do not enter receive mode afterwards.
- Beacons can occur as frequently as every 15 seconds.
- Beacons allow for tag inventory and will enable location capabilities in the system.



Templates

Images	Templates	Data
1	Barcode 1 Text 1	12345678 Baltimore Green
2	Barcode Text 1 Text 2	87654321 San Francisco
3	Barcode 1 Barcode 2	1357 Dalmatian Springfield
4	Text 1 Text 2 Text 3	12345678 Baltimore Green

Command:
Template Image Draw
 (Page=4, template=2, data=1)

Display:

The device screen shows the number 12345678, the word Baltimore, and the word Green, corresponding to the data in the table.

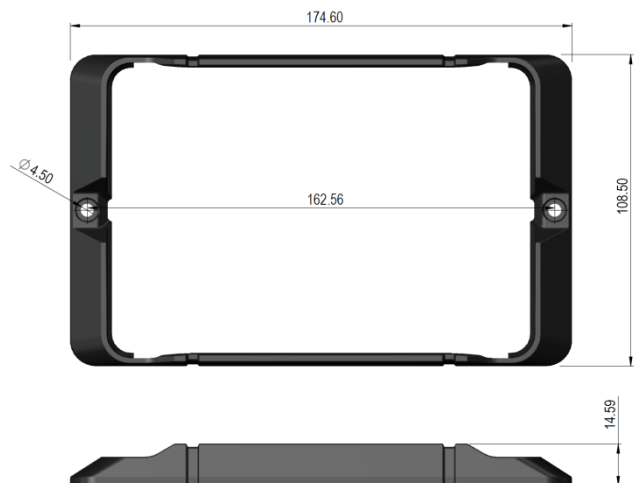
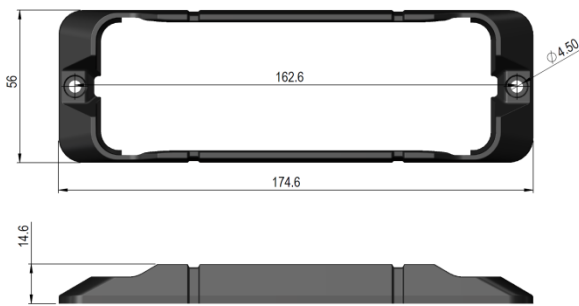
- Templates allow variable information to be downloaded against a static background.
- Templates allow for easy entry of data during normal operation.
- Reduced data demands, make RFID-only applications viable.
- Templates require the download of a background image, the template definition and the variable data – all which were logically connected.
- Placing in “Legacy” mode allows for drop-in replacement to existing installations.
- Multiple background images, template definitions and datasets are downloadable.
- Selecting background images, templates and data sets at display time allows for greater flexibility and utility for a wide range of applications.

Note: Color displays are not supported. The “images” color boxes above merely represent the background images.

Accessories

Brackets

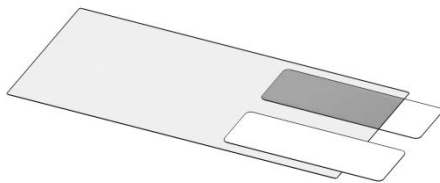
- Brackets are available for both tag sizes.
- Brackets provide both screw and tie-wrap features.
- Tag snaps securely into the bracket
- Tag can be removed for maintenance without needing to remove screws.



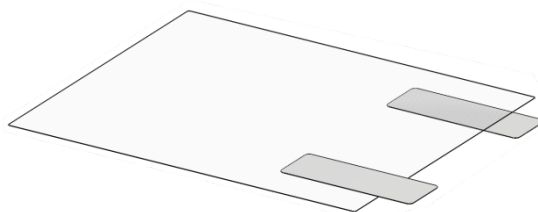
Screen Protector Overlay

A thin removable protective overlay, (similar to what is used on an iPhone) can be used to prevent small scratches from affecting the screen protector piece.

View 3 Tag Protector – order as CP01201



View 4 Tag Protector – order as CP01203



For technical support, please contact your local Omni-ID office or email: support@omni-id.com

www.omni-id.com