

T15e Tag

Deployment & User Guide

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We Are Now Securitas Healthcare

STANLEY Healthcare is now Securitas Healthcare. We are currently rebranding all our products and documentation, but until that process is complete you may still see visual references to STANLEY Healthcare in this document. All descriptions of functionality are accurate to the best of our knowledge.

Narning!

To comply with FCC and IC RF exposure compliance requirements, the device should be located at a distance of at least 20 cm from all persons during normal operation. The antennas used for this product must not be co-located or operated in conjunction with any other antenna or transmitter.

Le dispositif doit être placé à une distance d'au moins 20 cm à partir de toutes les personnes au cours de son fonctionnement normal. Les antennes utilisées pour ce produit ne doivent pas être situés ou exploités conjointement avec une autre antenne ou transmetteur.

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Introduction

The T15e Tag adds advanced temperature monitoring capabilities to Securitas Healthcare's market-leading family of Wi-Fi tags, making it ideal for use in all hospital departments.

Temperature and Vaccines for Children (VFC) Monitoring:

The tag uses a single probe to provide continuous measurement and data logging of refrigerators or freezers across the organization.

The T15e Tag can be supplied with a NIST traceable Certificate of Calibration* compliant to ISO 17025:2017, and meets all the Centers for Disease Control and Prevention's (CDC) requirements for VFC Data Loggers.

*<u>Note:</u> While NIST calibration is valid for a two-year period, upon receipt of the tag, customers can expect the remaining duration until re-calibration to fall within a range of 18 to 24 months.

The T15e Tag provides local audible and visual alerts, and works with Securitas Healthcare's MobileView platform to provide real-time alerting and reporting for temperature monitoring solutions.





What's in the Box?

The T15e Tag is supplied with the following components:

- T15e Tag
- 2 AA Batteries
- 3 Meter USB-C Temperature Probe
- 3 Meter USB-C Contact Sensor Cable and Contacts
- Tag Mounting Bracket
- Plastic Glycol Vial
- 2 Alcohol Prep Pads
- Various Mounting Accessories



T15e Features

T15e Tag Key Features

Large Display and Push Button Functionality

The tag's display shows the current temperature, the minimum and maximum temperatures measured since the last audit, battery, and power status, and alarm indications. The buttons are used to navigate and select the tag's menu options, activate the tag, and perform manual audits with a single press.

Audio and Visual Indications

T15e Tags include a buzzer with 4 different distinct sounds and 3 LEDs for status indications, such as tag activation, alerts, and low battery.

Wi-Fi & Cyber Security

The tag supports 802.1x Enterprise security networks with a PEAP-MSCHAPv2 protocol. Additionally, they support a HTTPs connection with MobileView Servers using the TLS1.2 protocol. This allows a MobileView Server authentication using pre-installed X.509 certificates.

Bluetooth Low Energy (BLE) Communication

T15e Tags use BLE technology to communicate with the Deployment Manager (DM) app for device configuration and setup.

Beaconing and Bidirectional (BD) Communication

The tags utilize lightweight beaconing communication (for standard messages) and Bidirectional Wi-Fi communication with full network association and authentication. This unique combination provides a flexible and scalable solution for advanced applications. The tags can operate with one network SSID in a secure or non-secure mode and is able to store up to two application server connections. The T15e Tags also support both static IP configuration and DHCP.

Battery and External Power Options

The tags are powered by 2 AA batteries, which is the <u>recommended power source</u>, and an optional power adaptor that can be used to save battery life. Battery levels are constantly monitored by the device and MobileView. The tag will use external power whenever available (batteries are recommended as a backup if external power is used).



Multi-Purpose USB-C Connector Interface

The T15e Tag has 3 multi-purpose USB-C connector ports. Power, temperature probe, and contact sensor inputs can be attached to any of the 3 ports, and are automatically recognized by the tag.

Detachable Temperature Probe and Contact Sensor

T15e Tags are supplied with a 3-meter USB-C temperature probe cable for temperature monitoring, and a USB-C Contact Sensor cable for refrigerator and freezer door monitoring.

Programmable Logging Interval

Logging intervals can be programmed to 5, 15, 30, or 60-minute intervals using pre-configured static configurations.

Manual Audit with a Single Button Press

The CDC requires healthcare facilities to inspect physically (also called "audit") each VFC-enabled device at least twice a day (once during the morning and once during the afternoon shift). A physical inspection is logged when the main button on the front of the tag is pressed.

Stores up to 64,000 Records

The T15e Tag's onboard memory can store up to 64,000 sampled temperature records. Additionally, temperature data is also sent to MobileView (if the tag is configured to sync with MobileView).

Easy Battery Replacement

The tag uses 2x 1.5V Alkaline AA batteries. Battery levels are constantly monitored and easily replaced by opening the battery cover on the back of the tag. The tag's memory is retained during battery replacement.

Off-Line Temperature Monitoring

The T15e Tag can store data during times of network connectivity failures. Recorded data is then automatically synchronized with MobileView within 24 hours after normal network connectivity has resumed, or immediately by performing a manual sync from the tag. Off-line data is viewed via MobileView Reports.

Flexible Mounting Options

The tag's external sensors, and convenient form factor, allows for secure mounting on variety of assets using its supplied cradle. Other industry-specific mounting accessories can be supplied by Securitas Healthcare.



Multi-Language Text Display

The tag's display text can be set to 5 additional languages (besides English); French, Swedish, Finnish, Spanish, and Portuguese.

Tag Descriptions

The following describes the parts of the T15e Tag:



Bottom View:



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No.	Description
1	3 indication LEDs – See LED and Buzzer Indications
2	LCD Screen*
3	Buzzer – See LED and Buzzer Indications
4	Navigation Arrow Buttons See <u>Using the T15e Tag</u>
5	Mute Alarm/Audit button
6	Battery Cover
7	USB-C Screw Tightening Hole (for securing the cable plug to the tag)
8	Multi-Purpose USB-C Connectors (Power, Temperature Probe, and Contact Sensor plugs can be plugged into any of the USB-C connectors).

Screen Values

The following explains the tag's screen values*:



No.	Description
1	Current temperature
2	The tag's configured temperature range.
3	Recorded temperature values since the last audit.

*<u>Note:</u> If the tag is used in a low-temperature environment -below 10°C (50°F)-, the display's refresh may take a few seconds. It is therefore recommended to use the tag's display menu when the tag is in a room-temperature environment.



Status Icons

The tag's status icons are displayed across the top of the LCD screen. The following table explains the Status lcons:

Icon	Description
	Full Battery
	Battery Level Medium
	Battery Low
ζ.	Depleted Battery. Change battery immediately
-	Power cable plugged in and supplying power to the tag
×	Power cable disconnected
≜	Temperature out-of-range Alert / Local Alarm
€t	Bidirectional (BD) Session in progress
\$ 0	BLE Session in progress
•	Contact Sensor Closed
	Contact Sensor Open
A	Warning message – See Viewing Warnings.

Tag Functions

The navigation buttons are used to navigate and select a menu option, change the temperature scale and enable or disable the button sound. The tag's main button is used for tag activation, muting alarms, and performing temperature audits.

Accessing and Using the Tag's Menu Options

The tag's menu options are indicated by the menu icon $|i\equiv|$.

- 1. Press the **Select** button to access the menu.
- 2. Use the **left arrow** button for up, and the **right arrow** button for down, to navigate through the menu.
- 3. To select an option, navigate to the required option and press the Select button.



Tag Menu Options

Option	Description
Main Screen	Displays the tag's main screen.
BLE Activation	Select this option to activate a BLE session with the Deployment Manager (DM) app. The BLE will be active for 30 min.
Tag Sync	Select this option to activate a BD session with MobileView.
Show Thresholds	Shows or Hides temperature out-of-range threshold values on the main screen.
Min/Max Values	Shows the recorded temperature and humidity values since the last audit.
Warnings	Shows any current warning messages. See Viewing Warnings
About	Shows the tag's MAC and Firmware (FW) version
Languages	Changes the screen display language. English is the default setting. Other available languages include French, Swedish, Finnish, Spanish, and Portuguese.

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Mounting and Connecting

Connecting the Power Adapter and Sensors

IMPORTANT!

- Batteries are recommended as a backup if external power is used.
- <u>Do not</u> connect two USB-C power adapters to the tag at the same time.
- It is highly recommended to use an approved Securitas power supply with the TAG (SKU: ADP-1500-U, ADP-1500-E). If a different power supply is used, ensure to connect the power cable to the power outlet <u>first</u> and then to the T15e Tag's USB-C port.

NOTE: The AC/DC adaptor must be safety approved according to IEC/EN/UL 60950-1 with a rated voltage of 5Vdc and rated current up to 3A maximum.

- The T15e Tag is not designed to be powered using a PC's USB outlet. If a PC's USB outlet is used, the Contact Sensor icon on the tag will always show as "closed", regardless of the actual state of the Contact Sensor.
- T15e Tags are compatible with USB 2.0 cables. Using USB 3.0 cables may result in inconsistent behavior of the tag.
- <u>**Do not**</u> connect two USB-C temperature probes to the tag at the same time. This will cause incorrect temperature values.
- <u>**Do not**</u> connect two USB-C contact sensors to the tag at the same time. This will cause incorrect alert triggering.
- The T15e Tag is only able to monitor Normally Open (NO) contacts.
- Make sure the plugs are tightened to the tag.

The T15e Tag has 3 USB-C ports and each cable has a USB-C connector with a tightening screw:





There is no specific port for each connector. <u>The Power, Temperature probe and Contact Sensor cables can</u> <u>be plugged into any port</u>.

Plug a connector into any port and tighten the tightening screw. The tag will automatically pick up the source that is connected.



Mounting the Tag



The tag must be mounted no higher than 2 meters from the ground.

The tag comes with a mounting cradle and double-sided tape for easy mounting. Additionally, Velcro and screws can be used (not supplied).





Mounting with Double-Sided Tape

Place double-sided tape in each square on the mounting cradle and mount the cradle accordingly. See <u>Mounting the Tag and Temperature Probe.</u>



Placing the Tag in the Cradle

Place the tag at an angle into the mounting cradle and make sure it clicks in place:





Removing the Tag from the Cradle

Push the mounting cradle's clip up and remove the tag:





Mounting the Tag and Temperature Probe

The 3-meter Temperature Probe cable has been designed with a 1-meter Teflon flat section. The flat section enables the cable to be easily fed through a fridge's or freezer's door seal and helps prevent wear and tear to the cable.







1. Mount the tag on the outside of the unit or in another location close to the unit.



2. Feed the Probe part of the cable (flat section) through the fridge or freezer door seal.



3. Immerse the Probe slowly into the plastic glycol vial's cap, by turning it until the Probe's spring makes contact with the vial's cap. Fill the vial with Propylene Glycol after the probe is inserted.

<u>NOTE:</u> To measure temperature as low as -50°C, it is recommended to fill the vial with Glycol. When measuring temperatures down to -80°C, it is recommended to use Ethanol.



NOTE: The vial can be used only in temperatures as low as -80°C. In temperatures lower than - 80°C the sensor should be used without the vial.



4. Mount the vial in the fridge or freezer accordingly. The vial can be mounted with Velcro, tie-wraps, double-sided tape, or the supplied tube holder.



5. Use the supplied cable tie mounts to attach the cable to the surface, to prevent it from becoming loose or being moved.

Installing the Contact Sensor

The supplied 3m Contact Sensor can be used to monitor the opening and closing of the monitored fridge or freezer door.

Install the Contact Sensor accordingly. NOTE: The placement of the Contact Sensor will vary.



Using the T15e Tag

Muting/Unmuting the Tag Button Sound

The tag button sound can be muted or unmuted by pressing the button \square under the speaker icon \P .

Changing the Temperature Conversion

The tag can display the temperature in either Celsius or Fahrenheit. To change the temperature conversion,

press the button \square under the conversion icon ^L .

Muting an Alarm

The tag has a local alarm that will sound if the configured temperature values are out of range. The alarm can be muted by pressing the main button .





Show/Hide Thresholds

You can choose to either show or hide the temperature thresholds on the main screen by doing the following:

- 1. Press the **Select** button to access the menu.
- 2. Navigate to the 'Show/Hide Thresholds' option using the arrow buttons \bigcirc .

Main Screen			
BLE Activation			
Tag sync			
Show Thresholds			
↓ ↓ ↓			

3. Press the **Select** button

Changing the Display Language

The tag's display is set to English by default, but supports 5 additional languages; French, Swedish, Finnish, Spanish, and Portuguese. To change the display language, follow the procedure below:

- 1. Press the **Select** button to access the menu.
- 2. Navigate to the 'Languages' option using the arrow buttons \bigcirc \bigcirc .





3. Press the Select button

Back to Menu				
English 🗸				
Française				
Svenska				
1	Ч	$ $ \downarrow		

- 4. Navigate to the required language using the arrow buttons
- 5. Press the **Select** button to select the required language.

Performing an Audit – Manual Inspection

For VFC deployments, the CDC requirements include performing a manual inspection of the device twice a day (12 hours apart) to verify that it is operating normally. This activity is called an "Audit."

Pressing and holding the main button 🗹 for three to five seconds displays 'Audit report has been recorded successfully'. This validates the inspection in accordance with CDC requirements. The operation is also logged by the tag and is sent to MobileView along with the current temperature, and the Minimum and Maximum Temperature values recorded since the last Audit. The Min and Max measurement values of the last audit are also renewed.





Viewing Min/Max Values

The tag stores the last recorded temperature and humidity audit values. These can be viewed by selecting **Min/Max Values** from the tag's menu:

BLE Activation
Tag Sync
Show Thresholds
Min/Max Values

Performing a Manual Sync with MobileView

If the tag has been set up to associate with MobileView via Bidirectional communication, a manual sync can be performed from the tag itself at any time. Typically a sync with MobileView is automatically performed every 24 hours.

If changes to the configuration of the tag have been made in MobileView, you can perform an immediate sync from the tag by doing the following:

- 1. From the tag itself, press the **Select** button to access the menu.
- 2. Navigate to the 'Tag Sync' option using the arrow buttons

Main Screen				
BLE Activation				
Tag sync				
Show Thresholds				
1	Ч	$ $ \downarrow		

- 3. Press the Select button
- A Bidirectional sync session will be initiated with MobileView. This will be indicated by the 'BD in Process' icon



Viewing Warnings

NOTE: Requires tag Firmware version 2.03.17 and above.

Warnings are triggered when there is a network connectivity issue with BD-configured tags. When a warning is triggered, the warning icon is shown on the tag's display.



Press the Select button 3.

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 $\mathbf{1}$

- The Warning message(s) are displayed. See Warning Messages below. 4.
- to exit the Warning screen. 5. Press the Select button



Warning Messages

The following table explains the possible warning messages and the recommended actions.

Warning Message	Recommended Action		
Access Point connection failed	Ensure the Access Point is in range and working		
	Ensure the Access Point's SSID/User Name/Password/Key are entered correctly in the tag configuration		
DNS server query failed	Ensure the DNS Server is available		
	Ensure the DNS IP address is correct		
	Ensure the App Server Host Name is correct		
	Consult your local IT department		
No response from Tag Controller	 Ensure access to the MobileView Server is not blocked by a firewall 		
	Ensure the MobileView Server (TC service) is running		
Wrong root CA Certificate	Verify the tag's installed root CA certificate is correct and valid. Consult your local IT department.		
Tag Controller connection timeout	The Tag Controller may be busy and can't send a new command. Either perform a manual BD session or wait about 30 minutes during which the tag will perform 1 retry.		
Invalid time setting. Logs are discarded	Ensure the tag's Real-time clock is configured:		
	 Configure the tag using the Deployment Manager or perform a manual BD session with MobileView. 		
	<u>Note:</u> Stored tag logs are discarded if the tag's Real-time clock is not in sync with Deployment Manager and/or MobileView.		
Failed to obtain IP Address	Ensure the DHCP Server is available		
	Ensure the DHCP settings are correct		
	Ensure the DHCP Server is not blocked by a firewall		
	 If a static-IP address has been used, ensure it is correct and available 		
	Consult your local IT department		



LED and Buzzer Indications

The tag has 3 LEDs and a buzzer for indications:



The following table explains the tag's LED and buzzer indications:

Action	Buzzer	LED #	LED	LED Color
Activation	Long beep	LED 3	3 blinks	Blue
Local Temperature Alert	Alarm tone	LED 2	Blinks	Red
Alert Dismiss	Long beep	LED 2	LED stops blinking	-
External Power Connection	Short beep	LED 1	LED turns on	Blue
External Power Disconnection	Long beep	LED 1	LED turns off	
Muting Buzzer	Short beep	LED 3	1 Blink	Blue
Un-Muting Buzzer	Short beep	LED 3	1 Blink	Blue
Changing Temperature Unit	Short beep	LED 3	1 Blink	Blue
Menu Option Selection	Long beep	LED 3	1 Blink	Blue
Audit	Audit tone	LED 3	3 Blinks	Blue
Low Battery	-	LED 2	Blinks	Yellow
Make Tag Blink	-	LED 3	Blinks	Blue



MobileView Battery & Power Indications

MobileView provides the following power indications for the T15e Tag:

External Power	Battery Powered	lcon	Description
Plugged in	Yes		Battery + Power Tag battery full.
			Battery + Power Tag battery medium.
		•	Battery + Power Tag battery low.
Plugged in	No	ĊŹŲ	Power - No Batteries
Disconnected	Yes		Battery Only Tag battery full.
			Battery Only Tag battery medium.
			Battery Only Tag battery low.



Replacing the Batteries

The tag is supplied with 2x 1.5V Alkaline AA batteries. Replace the batteries by opening the battery cover. The tag retains its memory during battery replacements.

Recommended replacement batteries: 2x 1.5V Alkaline AA batteries





CAUTION: Risk of Explosion if Battery is replaced by Incorrect Type. Dispose of Used Batteries According to the Instructions. **ATTENTION**: Risque d'explosion si la batterie est remplacée par un type incorrect. Mettre au rebus les batteries usagées selon les instructions.

Tag Recalibration

The T15e Tag should be recalibrated with the probe as a single unit. Removal of the probe with the tag is required during the recalibration process. See <u>Tag Recalibration</u>.



Reports

The following section explains the T15e Tag MobileView Reports.

The following reports are located in the Environmental Monitoring > Reports tab.

Battery Level Report

This report shows the history of the tag's battery level. Additionally the **Battery / PWR** column shows if the tag is being powered by an external power source.

Not PWRD indicates that the tag is running on battery power only.

PWRD indicates that the tag is using an external power source and battery.

Tag ID	Tag Model	Asset Name	Category	Battery / PWR	Last Report Date	Last Batter Replaceme Date	Estimated Y Remaining Battery ent Capacity (%)	Estimated Remaining Battery Life	Estimated Replacement Date
000CCC11E9 DB	T2s	Unattached tag		High	23/01/19 5:29:04 PM		97.0		
000CCC11EB 88	T2s	Unattached tag		High					
000CCC11F5 01	T2s	Unattached tag		High					
000CCC11F5 70	T2s	Unattached tag		High					
000CCC1502 02	T15	Unattached tag		High / Not PWRD	23/01/19 5:23:26 PM				
000CCC1502 21	T15	Unattached tag		High / Not PWRD	23/01/19 5:31:19 PM				
000CCC1502 25	T15	000CCC1502 25	0_T15	High / Not PWRD	23/01/19 5:30:57 PM				
000CCC1502 28	T15	000CCC1502 28	0_T15	High / Not PWRD	23/01/19 5:30:49 PM				
000CCC1502 35	T15	Unattached tag		High / Not PWRD	23/01/19 5:30:46 PM				
000CCC1502 3E	T15	Unattached tag		High / Not PWRD	23/01/19 5:30:42 PM				
000CCC1502 40	T15	000CCC1502 40	0_T15	High / Not PWRD	23/01/19 5:31:25 PM				
000CCC1502 44	T15	000CCC1502 44	0_T15	High / Not PWRD	23/01/19 5:29:48 PM				
000CCC1502 48	T15	Unattached tag		High / Not PWRD	23/01/19 5:13:51 PM				
000CCC3002 A8		Unattached tag		High					
000CCC3002 B4		Unattached tag		High					
000CCC3002 C5		Unattached tag		High					
000CCC3002 D0		Unattached tag		High					

VFC Audit Report (and offline data)

This report is used to show the VFC Audit history (BD and UD deployments) and offline data. Offline data (BD deployments only) is data that was not uploaded to MobileView in real-time (due to network failures) and was uploaded during a BD session or a manual sync.

Offline data is indicated with an asterisk (*).

VFC A	udit Report				STANLE Healthcare
Report run by: Mo	bileView Admin, 23/01	/19 5:44:23 PM			Signed B
Period: 16/01/19 5	:45:00 PM - 23/01/19	5:44:22 PM			
	T45 T				
Category: 0_115,	115 Tag				
This report contai	ins offline data, The re	ports which are mai	rked with an aste	erisk were logged	and processed offline.
		Lost Deported	Min Departed	Max Departed	
udit Time	Accet Name	Last Reported	Min Reported	Temperature	Current Location
Audit Time	Asset Name	(°C)	(°C)	(°C)	Current Location
17/01/19 4:13:40	000CCC150225	136.9	136.88	137.16	AS Building/Floor 6/Floor6 -
M					MV Side1
17/01/19 4:16:53	000CCC150225	136.9	136.9	136.9	AS Building/Floor 6/Floor6 -
M					MV Side1
17/01/19 4:21:08	000CCC150225	-200.24	-200.24	138.95	AS Building/Floor 6/Floor6 -
PM					MV Side1
17/01/19 4:22:43	000CCC150225	-200.21	-200.24	-200.21	AS Building/Floor 6/Floor6 -
M	000000450005	200.24	200.04	000.04	MV Side1
01/101/19 4:23:16	000000150225	-200.24	-200.24	-200.21	AS Duilding/FI00F6/FI00F6 -
7/01/10 /-25-20	000000150225	200.24	200.24	200.22	AS Building/Floor 6/Floor6
PM	000000100220	-200.24	-200.24	-200.22	MV Side1
7/01/19 4:29:24	000CCC150225	-200.24	-200.24	-200.24	AS Building/Floor 6/Floor6 -
M					MV Side1

Temperature History Report

This report retrieves historical data, showing the temperature read from an asset during a given period.

Date	Temperature (°C)	Location	Tag ID
10/12/18 4:30:18 PM	22.64	AS Building/Floor 6/Floor6 - MV Side1	000CCC150231
10/12/18 2:56:38 PM	25.48	AS Building/Floor 6/Floor6 - MV Side1	000CCC150231
Total number of results: 2			

Condition Monitoring Audit (and offline data)

This report provides a history of temperature readings, and contact sensor values, over time for a group of assets. The report shows detailed data for each asset separately. Additionally, the report supports Offline data.

Offline data (BD deployments only) is data that was not uploaded to MobileView in real-time (due to network failures) and was uploaded during a BD session or a manual sync.

Offline data is indicated with an asterisk (*).

Condition	Monitoring Audit			STANLEY Healthcare
Report run by: MobileVie	w Admin, 12/12/18 10:33:10 AM			Signed By
Period: 09/12/18 12:05:0	0 AM - 12/12/18 10:33:09 AM			
Asset: Kevin T15 Tag				
Condition Type: Temper	ature			
Assets located in: Any L	oration			
This report contains off	ine data, The reports which are marked wit	h an asterisk were logged and proce	essed offline.	
* This report contains off Date	ine data, The reports which are marked wit Tag ID	h an asterisk were logged and proce Temperature (*C)	essed offline. Location	
* This report contains off Date Asset Name:	Tag ID Tag ID Kevin T15 Tag	h an asterisk were logged and proce Temperature (*C)	essed offline. Location	
* This report contains off Date Asset Name: Range: Asset ID:	ine data, The reports which are marked wit Tag ID Kevin T15 Tag 11.5 °C to 19.0 °C Kevin T15 Tap	h an asterisk were logged and proce Temperature (*C)	essed offline. Location	
* This report contains off Date Asset Name: Range: Asset ID: Category:	ine data, The reports which are marked wit Tag ID Kevin T15 Tag 11.5 °C to 19.0 °C Kevin T15 Tag Blood Fridge	h an asterisk were logged and proce Temperature (*C)	essed offine. Location	
* This report contains off Date Asset Name: Range: Asset ID: Category: 10/12/18 5:47:57 PM *	ine data, The reports which are marked wit Tag ID Kevin T15 Tag 11.5 °C to 19.0 °C Kevin T15 Tag Blood Fridge 000CCC150231	h an asterisk were logged and proce Temperature (*C) 23.53	essed offine. Location Not available	
* This report contains off Date Asset Name: Range: Asset ID: Category: 10/12/18 5:47:57 PM * 10/12/18 5:42:56 PM *	ine data, The reports which are marked wit Tag ID Kevin T15 Tag 11.5 °C to 19.0 °C Kevin T15 Tag Blood Fridge 000CCC150231 000CCC150231	h an asterisk were logged and proce Temperature (*C) 23.53 23.72	essed offline. Location Not available Not available	
* This report contains off Date Asset Name: Range: Asset ID: Category: 10/12/18 5:47:57 PM * 10/12/18 5:42:56 PM * 10/12/18 5:37:54 PM *	Ine data, The reports which are marked with Tag ID Kevin T15 Tag 11.5 °C to 19.0 °C Kevin T15 Tag Blood Fridge 000CCC150231 000CCC150231	h an asterisk were logged and proce Temperature (*C) 23.53 23.72 23.74	essed offline. Location Not available Not available Not available	
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Tag Specifications

Environmental Specifications

- **Operating Temperature Range:** 0°C to 50°C (32°F to 122°F)
- Tag Storage Temperature Range: -20°C to 60°C (-4°F to 140°F)
- Humidity: 0% to 95% RH non-condensing
- Ingress Protection Rating: IP-54

Temperature Probe & Monitored Temperature Range

- Cable Length: Total 3m (2m ~4mm diameter PVC cable with 1m thin Teflon section 2x1.2mm)
- Probe Type: 2-wire waterproof RTD
- Connector: USB-C
- Probe Length: ~6mm diameter, 70mm length
- Probe Temperature Measurement Range: -200°C to +140°C (-328°F to +284°F)
- Accuracy: +/-0.5° C (+/-1° F)

Tag Memory

- 64 Mbit Flash memory
- Able to store up to 64.000 temperature readings

Physical and Mechanical

- **Dimensions LWH**: 114 x 77 x 20.3mm (4.4 x 3 X 0.8inch)
- Weight: 150g (5.3oz) with batteries

Connectors

- 3 x USB-C Multi-purpose connectors



Electrical

- Battery: 2 x 1.5V Alkaline AA replaceable batteries*
- External Power (USB-C Interface): 5V/1A Adapter (Optional)
 <u>*Battery life may vary in low temperatures</u>
 <u>NOTE:</u> The power supply is proprietary and must be purchased from Securitas Healthcare.

Display

– E-ink

Audio and Visual Indications

- Audio: Buzzer- 85dBA@10cm
- LEDS: 3 dual-color LEDS

Radio

- **Transmission power**: up to +19dBm (~81mW)
- Patented clear channel sensing avoids interference with wireless networks

Range

- Outdoor range: Up to 200m (650 feet)
- Indoor range: Up to 80m (260 feet)

Communication

- BLE (Bluetooth Low Energy): BLE 5.0 [2.402 GHz 2.480 GHz (2.4GHz bands)]
- Wi-Fi: 802.11 radio (2.4 GHz); b/g/n compliant

Wi-Fi Security Modes

- Open, non-encrypted
- WPA2-PSK(AES)
- 802.1x Enterprise security (PEAP-MSCHAPv2)

Logging Rates

- 5 minutes, 15 minutes, 30 minutes and 60 minutes

Contact Sensor Cable

- Cable Length: 3m ~4mm diameter PCV
- Connector: USB-C
- Inputs: Single normally open (NO)

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Certification

Radio, EMC:

FCC Part 15 Subpart C, Subpart B, RSS-247, EN 300-328, EN 301-489 Radio Equipment Directive 2014/53/EU (RED), Radio Equipment Directive S.I.2017/1206 (RED) RoHS 2 Directive 2011/65/EU, RoHS 2 Directive S.I.2012/3032

Safety:

CE, UKCA, EN62368/UL62368/IEC62368, Japan 201-200712

Regulatory Compliance and Warranty

FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

WARNING: This device complies with Part 15 of the FCC Rules and RSS-247 of Innovation, Science and Economic Development Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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.

Canada—Innovation, Science, and Economic Development Canada

This device contains licence-exempt transmitter(s)/receiver(s) that comply with the Innovation, Science, and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.



EU&GB Declaration of Conformity

This declaration of conformity is issued under the sole responsibility of the manufacturer who declares that the T15e radio equipment is in conformity with the following relevant Union harmonisation legislations:

Radio Equipment Directive 2014/53/EU (RED), Radio Equipment Directive S.I.2017/1206 (RED)

RoHS

RoHS 2 Directive 2011/65/EU, RoHS 2 Directive S.I.2012/3032

CE Conformance

CE

Australia



Japan

€ R 201-200712

United Kingdom





UL



Brazil

www.gov.br/anatel/pt-br/

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.