



Installation/Usage Guide:
Vera-T™ Family
PRELIMINARY CONTENT ONLY

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Regulatory Compliance

All Exavera devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required. Any changes or modifications to Exavera Technologies equipment, not expressly approved by Exavera Technologies, could void the user's authority to operate the equipment.

When Exavera's devices are professionally installed, the Radio Frequency Output Power will not exceed the maximum allowable limit for the country of operation.

Antennas: Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could cause damage and may violate regulations.



Country Approvals

Regulatory markings are applied to the device signifying the radio(s) are approved for use in the following countries: United States, Canada.

Operation of the device without regulatory approval is illegal.



Health and Safety Recommendations

Warnings for the use of Wireless Devices

Please observe all warning notices with regard to the usage of wireless devices

Potentially Hazardous Atmospheres

You are reminded to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles (such as grain, dust, or metal powders) and any other area where you would normally be advised to turn off your vehicle engine.

Safety in Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely affected.

FCC / EU RF Exposure Guidelines

Reducing RF Exposure—Use Properly

It is advisable to use the device only in the normal operating position.

Power Supply

Use only an Exavera approved power supply

Radio Frequency Interference Requirements—FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

Introduction

Audience and Objectives

This document has been created for individuals responsible for maintaining Exavera's eShepherd location and identification systems.

Product Overview

In conjunction with Exavera's RF reading devices, the Vera-T family of RFID-enabled tags provide identification and location services across a broad spectrum of applications.

How to Get Help





To obtain Technical Assistance, you can contact Exavera's Customer Support as follows:

- **Phone:** (603) 570-*<to be provided>*
- **Email:** support@exavera.com
- **Customer Support Web Site:** *<to be provided>*

Please have the following information available when contacting customer support:

- List of hardware components with serial numbers and revision levels
- System Software version number and revision level
- Error and diagnostic messages with associated LED indications
- Details about recent configuration changes, if applicable

Vera-T Family Components

Part		Description
	Vera-T Asset Tag Part #: VTA-311	RF-enabled asset tag
	Vera-T Asset Tag Part #: VTA-331	RF-enabled asset tag
	Vera-T Staff Badge Part #: VTS-321	RF-enabled staff/visitor badge
	Staff Badge Charger Part #: VTS-PWR-NA	Staff badge AC charging unit

Operational Considerations

Battery Strength

Reporting

The eShepherd system is capable of reporting battery voltage levels back to end-user applications and can report recharging/tag replacement needs. If this feature is implemented in your application, you will be alerted to the timing of these actions.

If your application is not configured to report tag voltage, please recharge the staff badge every seven days. Similarly, asset tags should be replaced in accordance with your deployment specifications (typically every two to five years). Replacement tags are available from your Exavera representative.

Charging (Vera-T Staff Badge)

The Vera-T Staff Badge ships with an AC charging unit. To recharge, gently plug charger into socket located on the bottom of the tag (see Figure 1), then plug charger into a standard AC outlet.



Figure 1

A small LED is adjacent to the charging socket. A green light indicates badge is charging; full charge is achieved when green light goes out.

A red light indicates a faulty battery. Should the red LED appear during a charge cycle, unplug charger from wall, wait 60 seconds and plug in again. If the red LED appears a second successive time, please contact Exavera support.

Cleansing

With reasonable handling, no significant physical maintenance is required of the Vera-T asset tags or staff badges. Should spot cleaning be required, do not submerge the readers or tags. Instead use a damp cloth with a small amount of mild cleansing solution. Sterilization of the tags is not possible.

Technical Specifications

Vera-T Asset Tag (VTA-311)

Specification	Description
Battery and Capacity	Includes non-replaceable battery; capacity dependent upon selected communication frequency (typically range from two to five year life)
Dimensions	Height: 53.61 mm (2.1 in) Width: 32.87 mm (1.3 in) Depth: 14.53 mm (.57 in) Weight: 19.84 g (.7 oz)

Vera-T Asset Tag (VTA-331)

Specification	Description
Battery and Capacity	Includes non-replaceable battery; capacity dependent upon selected communication frequency (typically range from two to five year life)
Dimensions	Height: 15.21 mm (.59 in) Width: 75.11 mm (2.9 in) Depth: 26.76 mm (1.1 in) Weight: 48.19 g (1.7 oz)

Vera-T Staff Badge (VTS-321)

Specification	Description
Battery and Capacity	Includes rechargeable battery with a fully charged capacity of seven days. Charging LED indications – illuminated green light indicates badge is charging; full charge is achieved when green light goes out. A red light indicates a faulty battery.
Dimensions	Height: 56.55mm (2.23 in) Width: 86.23mm (3.4 in) Depth: 13.27mm (.52 in) Weight: 36.85g (1.3 oz)