

Integrity 150 – Quick Installation Guide

Overview

- Solar-powered satellite tracker for long-term asset monitoring.
- Connectivity: Globalstar LEO satellite network + BLE 5.0 for external sensors.
- Dimensions: 10.39" × 3.38" × 1" (264 × 86.1 × 26.6 mm); Weight: ~14.2 oz (402 g).
- Power: Built-in rechargeable, non-replaceable Lilon battery with solar charging (10+ years design life).
- Durability: IP68/69K; MIL STD 810G shock/vibration compliance.
- Integrated: GPS, 3 axis accelerometer, Nordic MCU; tamper detection & device health monitoring.
- **Activation:** Turns ON when solar panel is exposed to daylight; install within 1–2 days of unpacking.

Included Hardware

- Integrity150 Solar Tracker
- Precut 3M VHB tape
- Tamper switch magnet (round center piece)
- Installation document

Required Tools and Materials

- Alcohol-based cleaner; clean rags/towels
- Heat gun or butane torch (for cold installs to improve VHB bond)
- Cordless drill; 8×1² self-tapping screws
- Utility knife; silicone sealant
- Mobile phone/tablet with internet (for pairing)

Do NOT mount the antenna side against metal



Mounting Location and Guide

- **Mount with clear view of sun and sky.** Minimum flat area: 10.39" × 3.38" (264 × 86.1 mm).
- Best orientation: face up on a flat, horizontal surface.
- Vertical mounting is possible but may reduce comms, charging, and GPS accuracy; if vertical, orient with Solar panel end upward.
- Choose a location protected from knocks/damage; avoid backing elements that screws could damage.
- **Do not overtighten** screws to avoid cracking the housing.

Prep the Integrity150 (Before Mounting)

- Clean the device back with alcohol and a microfiber rag.
- Remove the temporary shipping tape holding the round magnet, then place the magnet back into its indentation.
- Apply the precut 3M VHB tape: align perforated holes with the four indents to maintain the magnet switch cutout alignment.
- For cold conditions, gently warm both the device back and the VHB tape just before bonding.
- Press firmly around the full VHB area to ensure adhesion, then cut 5 of the 6 perforated tabs around the magnet switch cutout.

Step by Step Installation

1. Identify Location: Select a spot per the guidelines (clear sky view; orientation consideration).
2. Clean Mounting Surface: Thoroughly wipe with alcohol-based cleaner; let dry.
3. Final Device Prep: Remove the clear protective film on the back; ensure the magnet cutout remains part of the assembly.
4. Cold-Weather Tip: If applicable, warm both the asset surface and device back just before adhesion.
5. Place Device: Carefully position; VHB bonds quickly and is hard to reposition once set.
6. Apply Pressure: Press down across the device and edges for 1–2 minutes for full adhesion.
7. Secure with 8×1” self-tapping screws. **Do not overtighten.**
8. Seal Perimeter: Apply silicone around edges for added environmental protection.

Notes & Best Practices

- **The unit powers on automatically in daylight; to preserve charge, install within 1–2 days of unpacking.**
- Vertical mounting: keep the solar panel end pointing upward for best transmission when vertical.
- Avoid metal directly over the antenna area; check the device label/diagram for antenna location.
- Pair the Integrity150 to the asset prior to installing using the TGI Connect Mobile Application

Installation Video:



Pairing to asset:

