



SmartOne Solar Installation and Activation Guide

*Quick and Simple
Installation in 5 Minutes*



SmartOne Solar™ INSTALLATION and ACTIVATION



Quick Installation Guide:

PART A: INSTALLATION

1. Tools required

- Heat source such as a heat gun or hair dryer
- Cleaning solvent
- Screw gun (optional)
- Exterior silicon caulking (optional)

2. Parts

- SmartOne Solar™ Device
- 3M VHB backing tape
- 4 screws (customer supplied, recommended size for secure mounting: 18-8 stainless steel #6 pan-head machine screws.)

3. Installation Steps - Using VHB Backing Tape

***PLEASE NOTE: INSTALLATION WITH SCREWS, VHB TAPE, AND SILICON CAULKING IS STRONGLY RECOMMENDED – GO TO INSTALLATION STEPS UNDER SECTION 5**

- 1) Apply VHB tape by removing the white peel and attach to device ensuring that the device barcode is still visible.
- 2) Locate a place on the asset to attach/mount the SmartOne Solar™ device where the device will have a line of sight to the satellite network. The solar panel should always face outward. If side-mounted, a southern exposure orientation is optimal.
 - a. If side-mounted in the vertical position, the device should be placed with the solar panel facing downward. This orients the transmitting mechanism to the sky.
 - b. If side-mounted in the horizontal position, the solar panel can be oriented either left or right.
 - c. If top-mounted, the unit only needs to face the sky in the upright position where the solar panel and sight lines are not obstructed
- 3) Clean the receiving surface area using alcohol or other solvent
- 4) Dry the surface area
- 5) For proper tape adhesion, heat the receiving surface area till it is warm to the touch. Surface area must be heated especially if ambient temperature is cold. Warm the tape side of the device without damaging the protective backing paper. Do not damage or puncture the tape. Do not damage the device.
- 6) Remove the protective backing from the tape and then carefully press the device into place ensuring good adhesion between the device and the asset surface. Hold in place until properly adhered. Once set into place and cured do NOT attempt removal. (See Removal Steps below if removal is necessary.)

4. Installation Steps - Using screws, VHB Backing Tape and Silicon Caulking

If mounting to an asset where the surface area can accept screws and if drilling holes into the surface will not compromise the asset's surface integrity, it is recommended to fasten the device using screws as below:

- 1) Follow Steps to installation steps 1 - 5 for using VHB Backing Tape above
- 2) Find and mark screw locations using the device as a template
- 3) Drill 4 holes into the surface to accept the correct size screws per the template
- 4) Secure the device to the asset using 4 screws
- 5) For extra protection from wind shear and added adhesion, apply a bead of silicone caulking around the contour base of the device
- 6) Wipe any excess silicone caulking off the sides of the unit
- 7) Once the device is securely fastened, the job is complete.

5. Removal Steps

While there are several methods of removing the VHB tape using solvents, Goo Gone, WD-40, alcohol, hand sanitizer etc., and a scraper or putty knife, these methods may not be practical in the field, nor may they be fully effective or expedient. We recommend using a textured metal wire to "saw" the tape from the back of the device. Cutting the bondline is most effective. A textured metal wire used in a sawing motion will remove the tape. Fishing line may also be used. If attempting to remove a device secured in place with screws, remove the screws first before attempting to remove the tape. Do not damage the unit when using any removal method. Avoid prying the unit off as this could result in damage to the unit. **Damaging the unit voids the warranty.**



SmartOne Solar™ INSTALLATION and ACTIVATION



Quick Installation Guide:

PART B: ACTIVATION

1. Overview

The SmartOne Solar™ device requires activation following installation. Activation, de-activation and re-activation of the unit are simple and fast. Before use, with the magnet tag attached fully charge the device by leaving it outdoors for 24-48 hours

2. Activation

A black rubberized tag that holds a magnet is delivered with the SmartOne Solar™ device. The magnet acts as an OFF/ON switch. The tag conforms to the shape of the device and is located on the front of the device below the solar cells. When this tag is attached to the device, the device remains OFF and is NOT activated. When the tag is removed, the device is activated and is ready to message. **(Keep black magnets for any future de- or re-activation needs).**

3. Messaging

Remove the magnet tag when in full view of the sky for the device to acquire a GPS fix. The unit is now activated and ready for use. Once activated, the device will send location messages, once assigned to an asset in the Web Portal, to the satellite network until such time as the magnet tag is replaced.

4. Charging

The device receives a full charge within 24-48 hours of exposure to daylight. The device should be exposed to daylight regularly; for optimal charging, ensure the solar panel is clean and free of debris.

5. De-activation

To turn the device OFF, replace the magnet tag to its original position on the front of the device. This will prevent messages from being generated by the unit.

6. Re-activation

To re-activate the device or to perform a reset/re-activation, put the magnet tag in place for 5 minutes. The unit's internal capacitor will discharge and reset the messaging cycle. Then in full view of the sky, remove the magnet tag and the device will start to acquire a GPS fix and once again be ready to generate messages to the satellite network.

PART C: DEVICE CARE and WARRANTY

1. The unit is maintenance free.
2. When the unit is installed on top of an asset, care taken in relation to snow scraping and mud removal will benefit the operating efficiency of the device. The unit is designed to operate under all weather conditions and in extreme temperature ranges.
3. Avoid spraying the SmartOne Solar™ device directly with high pressure water or solvents
4. Be sure to remove any large debris and avoid large obstructions which may limit the device's ability to connect to the satellite network.
5. Devices are warranted against defects for the contract term. Contract terms begin on the unit's original shipping date. Units which are lost or physically damaged are not covered under this warranty.