I.   Introduction

The **ETP-CI-4G-V** is used in conjunction with an ETP-500 Series ADA-compliant, hands-free Emergency Phone.

II.   Prerequisite Cellular Service Requirements

Prior to installation and setup, the **ETP-CI-4G-V** Cellular Interface should have an activated **4G micro-SIM (3FF) card** provided by Verizon.

Please provide this document and reference this page to the Verizon representative prior to plan activation.

If there are any issues with obtaining or activating a plan, please contact Verizon at the listed telephone number below.

- Verizon IoT Technical Support, Tier II: **800-525-0481**
- You **must** provide the **MTN** of the cellular interface
- The Verizon support representative should verify the required SFOs are applied to each activated line

This device is certified and listed on the Verizon Open Development Showcase as the Janus POTSwap – the listing can be found here:

https://opendevelopment.verizonwireless.com/device-showcase/device/10981

Verizon has specified the following plan and activation requirements:

(1) **Verizon Machine-to-Machine (M2M) Plans (Do NOT Use Fixed Plans)**

   a) Plans **must be** provisioned with Offer Development before activation.

   b) Share Group 1 & 2, **custom M2M plans require DACC codes** to be built for the Janus POTSwap GPO.

   c) Janus recommends 250MB plan for a traditional POTS replacement application—minutes will vary.

   Required SFO for Voice
   81143 Access Advanced Calling
   81186 Access HD Voice
   81158 HD Voice
   68872 Call Delivery
   73733 Decline Voicemail
   54307 Block Text Messaging
   CRITICAL – Remove any voice blocks

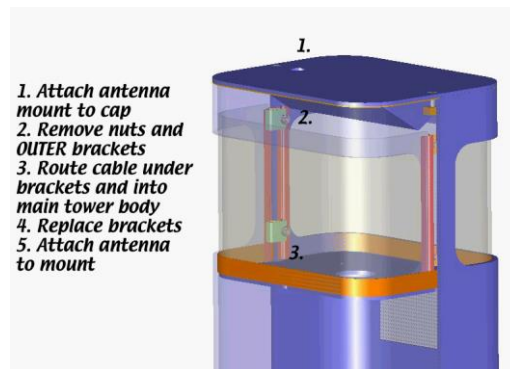(2) An activated 4G micro-SIM (3FF) card provided by Verizon.

III. Contents

Before beginning installation, make sure you have all the included components. The **ETP-CI-4G-V** includes:

Qty.	Part Number	Description
1	68746	ETP-CI-4G-V Cellular Interface
1	ANT-CI-4G	MIMO antenna kit (includes antenna with built-in cable assembly)
2	4247	8-32 x 1/2 BH Screw
2	4248	8-32 x 5/16 Hex Nut
	42767	#10 External Lock Washer

IV. Installing the Antenna

The **ETP-CI-4G-V** Cellular Interface includes a remote-mounting MIMO antenna. The remote-mounting MIMO antenna should be attached to the Talk-A-Phone enclosure (e.g., ETP-MTE-W, ETP-MT/R-SOLAR, ETP-MT/R-PCS, etc.) via the built-in antenna mounting hole. To install the remote-mounting MIMO antenna, please follow the separate antenna mount instructions included with the remote-mounting MIMO antenna.

1. Attach antenna mount to cap
2. Remove nuts and OUTER brackets
3. Route cable under brackets and into main tower body
4. Replace brackets
5. Attach antenna to mount

Figure 1. An example of mounting the remote-mounting MIMO antenna onto the cap of an **ETP-MT/R-PCS** tower.

The remote-mounting MIMO antenna will be connected to the **ETP-CI-4G-V** Cellular Interface through the ports listed in **Section V.2**.

V. Installing the Cellular Interface

1. The front panel of the **ETP-CI-4G-V** Cellular Interface provides the following:

   (1) Cellular signal strength indicator;
   (2) LED indicators for *POWER*, *STATUS, CELL*, and *GPS*;
   (3) *DATA* port reserved for future use;
   (4) *MODE* button reserved for future use;
   (5) *RESET* button for rebooting the cellular interface;
   (6) *PHONE-FXS* port for connecting to an ETP-500 Series Phone.

Figure 2. Front panel of the **ETP-CI-4G-V** Cellular Interface.

2. The rear panel of the **ETP-CI-4G-V** Cellular Interface provides the following:

   (1) Input terminal for 12VDC;
   (2) *CELL 1* connector for remote-mounting MIMO antenna;
   (3) *CELL 2* connector for remote-mounting MIMO antenna;
   (4) *GPS* connector for remote-mounting MIMO antenna;
   (5) *SIM* slot for micro-SIM (3FF) card;
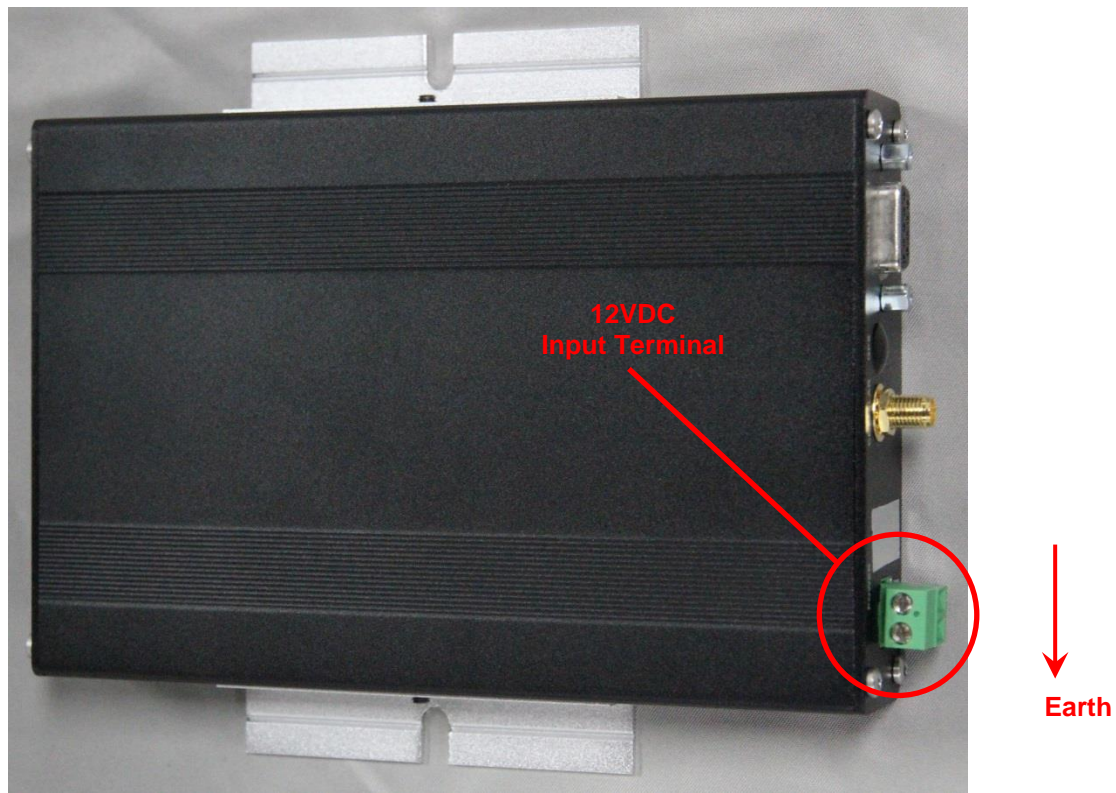   (6) *CONFIG* port for a mini-USB connection (for Talkaphone Technical Support purposes only).

Figure 3. Rear panel of the **ETP-CI-4G-V** Cellular Interface.

3. Insert the micro-SIM (3FF) card into the slot labeled **SIM** (see **Figure 3** – **Item 5**).

   IMPORTANT: The orientation of the micro-SIM card should be angled notch entering the slot first with the metal contacts facing down toward the mounting flanges.

4. Using a plastic spudger or a small flat head screwdriver, push the micro-SIM card into the slot until a click is heard. To remove the micro-SIM card, push the card until a click is heard and the card springs out of the slot.

5. Connect the cables from the remote-mounting MIMO antenna to the **CELL 1, CELL 2,** and**, GPS** connecters (see **Figure 3** – **Items 2, 3, and 4**. On the built-in cable assembly of the remote-mounting MIMO antenna, there are two (2) cables labeled **CELL** – connect those cables to the **CELL 1** and **CELL 2** connectors. Any of the two **CELL** cables can connect to either connector.

6. Connect the ETP-500 Series Phone to the **PHONE-FXS** port.

7. If the interface is being powered by an SLR Series (solar) kit, connect the **LOAD** terminals of the solar controller to the appropriate polarity markings on the **POWER** terminal (12VDC input) of the **ETP-CI-4G-V** Cellular Interface. Otherwise, connect a 12VDC power source appropriately with respect to polarity.

8. Using the built-in mounting flanges, attach the **ETP-CI-4G-V** Cellular Interface onto the internal mounting panel of the Talk-A-Phone enclosure (e.g., ETP-MTE-W, ETP-MT/R-SOLAR). The **ETP-CI-4G-V** Cellular Interface should be mounted so that the 12VDC input terminal is on the lower right corner (i.e. toward the Earth).

Figure 8. This photo illustrates the appropriate orientation and mounting position for the **ETP-CI-4G-V** Cellular Interface.

VI. Activation of Cellular Service

Obtain an M2M voice plan from Verizon. Per the aforementioned installation instructions, install an activated micro-SIM card provided by Verizon into the **ETP-CI-4G-V** Cellular Interface.

VII. Programming the ETP-500 Series Phone

The ETP-500 Series Phone requires specific programming for operation with the **ETP-CI-4G-V** Cellular Interface. At minimum, the ETP-500 Series Phone should be programmed with the following codes:

```
* 4 **
* 13 * <Phone_Number_to_Dial> *
* 14 * 1 *
* 18 * 5 *
* 24 * 0 *
* 27 * 0 *
* 55 *
* 56 *
* 58 * <Speak_to_Record_Voice_Message>(optional)
```

For a full comprehensive list of programming codes, reference the Installation & Operation Manual for Emergency/Information Phones.

VIII. Firmware Over-the-Air (FOTA) Update for Verizon 911 Compliance

If the **ETP-CI-4G-V** Cellular Interface is manufactured prior to May 2021, a firmware over-the-air (FOTA) update will need to be carried out in order to support dialing to 911. Without this FOTA update, the ETP-500 Series Call Station will not be able to dial 911 via the **ETP-CI-4G-V**.

The FOTA update can be initiated through the following steps.

1. Power cycle the **ETP-CI-4G-V** Cellular Interface.

2. After 60 minutes of operation, the **ETP-CI-4G-V** will attempt the FOTA update.

    (1) During the FOTA update, the *STATUS* LED indicator will start fast blinking.

    (2) This process can take anywhere from 10 to 15 minutes depending on the signal strength.

    (3) When the FOTA update completes successfully, the *GPS* LED indicator will change from **green** to **red**.

3. Power cycle the unit a second time to complete the FOTA update.

4. The *GPS* LED indicator will illuminate **green** after the second power cycle. The GPS antenna must be connected and installed.

    If the *GPS* LED indicator is still **red** after the second power cycle and the GPS antenna is installed, please power cycle the unit one more time.

5. If the *GPS* LED indicator remains **red** after multiple power cycles, please contact Talkaphone Technical Support.