

Fratech Multipath IP Omni-link STU

Installation Guide: GPRS

This is an installation guide for installing and connecting a Multipath-IP Omni-link STU to the Multipath-IP network via a GPRS (General Packet Radio Service) connection.

On Site Installation

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Note

After installation, standard site commissioning tests should be completed.



Detailed Instructions: On Site

1

Connect the Antenna to the Omni-link STU

1. Connect the antenna to the GSM modem.
2. Ensure the antenna is "finger tight" only. DO NOT OVERTIGHTEN.
3. DO NOT cut or otherwise modify the cable.
4. Ensure the cable is free of any kinks or sharp bends.



Connect the Omni-link STU to the Alarm Panel

1. Connect the alarm panel to one of the four interfaces available, depending on your panel. (PANEL phone cable, Concept 10pin header, TTL Securitel interface or RS232 Securitel interface.)
2. Power up the Omni-link STU. This can be done using the supplied plug-pack with a battery **OR** connect the 12V DC power from the power supply source to ONE of the TTL or RS232 interface connections. If plug-pack used, do not connect +12V from Alarm Panel.

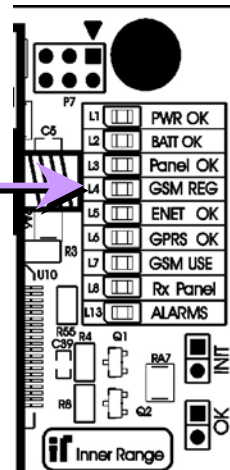
2

Check for Connection to the GSM Network

1. *Check for connection to the GSM network.* The "GSM REG" lamp will initially flash. When the Omni-link STU has successfully connected to the GSM network, then the "GSM REG" lamp will illuminate for approximately 5 seconds and then flash. (This 5 second illumination and flash sequence, will repeat every 10 seconds)

After 1 minute, if the "GSM REG" lamp does not enter the 5 second illumination cycle, then relocate the antenna to a position with greater GSM signal strength.

2. Check for adequate GSM signal strength. Once the "GSM REG" lamp has entered the 5 second illumination cycle, then the number of flashes represents the GSM signal strength.
 - 1 or 2 flashes represents low or unacceptable GSM signal strength.
 - 3 flashes represents adequate GSM signal strength.
 - 4 or 5 flashes represents good GSM signal strength.



Note

If the "GSM REG" lamp shows low GSM signal strength (i.e. 1 or 2 flashes), then relocate the antenna to a position with greater GSM signal strength.

Note

The signal level on a mobile phone can also be used to check the signal strength at different positions around a site. When relocating the GSM antenna, allow 30 seconds for the new signal strength to be displayed.

3. In order to check the signal strength of the Backup SIM card (if it is available) the following steps can be used:
 - a. Connect a shorting link across the "OK" pins of the Omni-link STU.
 - b. Immediately the "PWR OK" and "BATT OK" lamps will begin flashing alternately and all other lamps will turn off.
 - c. In order to use the Backup SIM card the modem must first reset. Normally the modem takes about 1 minute to reset and display the signal strength of the Backup SIM card.
 - d. The "GSM REG" lamp now represents the status of the Backup SIM card in the same way as described in Part 2 above.
 - e. Repeat the steps described above Part 2 in order to maximise the signal strength for the Backup SIM card by moving the antenna location.
 - f. When this test has been completed, remove the shorting link from the "OK" pins. The "PWR OK" and "BATT OK" lamps will immediately stop flashing and all of the other lamps will again represent their labelled statuses.
 - g. Again the modem will take approximately 1 minute to reset and use the Primary SIM card again.
 - h. The swapping and checking of SIM cards can be repeated as many times as necessary.

3

Contact the Central Monitoring Station and Enrol the Multipath-IP Omni-link STU

1. Contact the Central Monitoring Station and request that the STU be enrolled (The Central Monitoring Station should already have the mobile phone number of the STU. This is required for enrolment. This number is on the plan activation form.)
2. Receive confirmation from the Central Monitoring Station that the STU has been successfully enrolled.
3. Whilst enrolling, the "GPRSOK" LED should flash, and when communication is established the "GPRSOK" LED should be on.

4

Minimum suggested site commissioning tests for a Multipath-IP Omni-link STU using GPRS

1. Verify polling on the primary IP path (GPRS1):
 - a. The STU should be communicating to the Multipath-IP server via GPRS1. To verify this, request the Central Monitoring Station to check the Multipath-IP Server, this will show the path that is being used. Also the "GPRS OK" lamp should be on solid.
2. Verify polling on the redundant secondary IP path (GPRS2), if available:
 - a. Request that the Central Monitoring Station swap the active SIM from SIM1 to SIM2. After approximately 1 minute the Omni-link STU should be communicating to the Multipath-IP Server via GPRS2. To verify this, request the Central Monitoring Station to check the Multipath-IP Server, this will show the path that is being used. Also the "GPRS OK" lamp should be on solid.
3. Verify recovery from power failure
 - a. Remove power from the Omni-link STU for approximately 10 seconds then apply power again. After approximately 1 minute the Omni-link STU should be communicating to the Multipath-IP Server via the primary IP path (GPRS1). To verify this, request the Central Monitoring Station to check the Multipath-IP Server, this will show the path that is being used. Also the "GPRS OK" lamp should be on solid.