



SafeMobile

Tetra Station Connection and Configuration

IMPORTANT! Check that the station is connected using a **data cable GMKN1022A** and not a programming cable!

Gateway Configuration

For the gateway station you will have to change the following fields:

- in Subscriber Unit Parameters, you will set a value for gateway's Radio ISSI

The image shows a software interface for configuring a gateway station. On the left, a tree view under 'Codeplug' has 'Subscriber Unit Parameters' selected. On the right, a table displays various parameters, with 'Radio ISSI' highlighted in red and set to the value 8388610. A 'Reset' button is visible next to this field. A blue arrow points from the selected menu item to the corresponding table entry.

| | | | | |
|----|-----------------------------------|-------------------------|--------------------------|-------|
| 9 | Subscription Temporary Disabled | | <input type="checkbox"/> | |
| 10 | Equipment Permanently Disabled | | <input type="checkbox"/> | |
| 11 | Subscription Permanently Disabled | | <input type="checkbox"/> | |
| 12 | Serial Number | 857TLJ2250 | | |
| 13 | Radio TEI | 000108242169560 | | |
| 14 | Radio ISSI | 8388610 | | Reset |
| 15 | Organization | | | |
| 16 | Person | | | |
| 17 | This Radio Phone Number | | | |
| 18 | This Radio Private Number | 8388610 | | |
| 19 | Last Modification Date | January 21, 2011, 18:41 | | |

- in PEI Parameters, you will set the
 - Baud Rate values to 9600
 - Parity Bit value to PARITY_NONE
 - ETSI AT SDS/Status Format will be set to unchecked

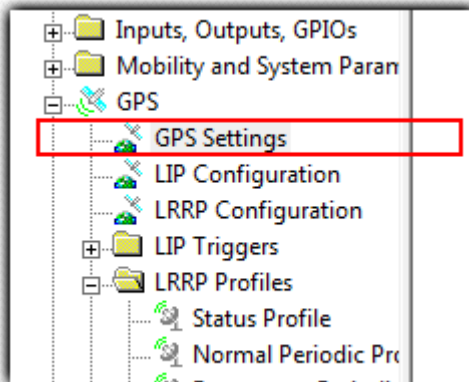
| | Field Name | Field Value | Reset |
|---|---------------------------|--------------------------|-------|
| 1 | Baud Rate | 9600 | |
| 2 | Parity Bit | PARITY_NONE | |
| 3 | ETSI AT SDS/Status Format | <input type="checkbox"/> | |

User station Configuration

While the radio that is used at the Gateway needs slight modifications, the radios in the field need basic setup:

- GPS Settings

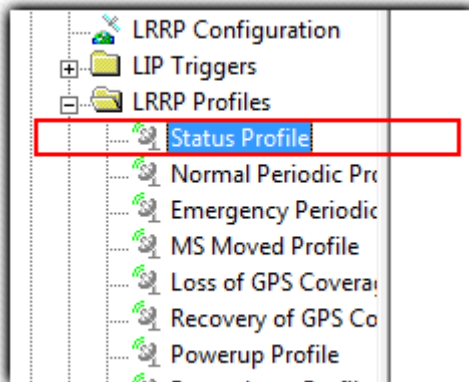
- GPS Authorized ISSI Base will be set to the Gateway's Radio ISSI value
- GPS Location Protocol set to LRRP
- GPS Coordinates set to Latitude/Longitude



| | | | | |
|----|--------------------------------|-------------------------|-------------------------------------|-------|
| 5 | Beep for GPS Coverage | | <input checked="" type="checkbox"/> | |
| 6 | Notification for GPS Coverage | | <input checked="" type="checkbox"/> | |
| 7 | GPS Bearer | SDS | | Reset |
| 8 | GPS Authorised ISSI Base | 8388610 | | Reset |
| 9 | GPS Authorised ISSI Range | 50 | | Reset |
| 10 | GPS Authorised IP Base | 0. 0. 0. 0 | | |
| 11 | GPS Authorised IP Network Mask | 255.255.255.254 | | |
| 12 | GPS Coverage Poll Period, sec | 180 | | Reset |
| 13 | GPS Location Protocol | LRRP | | |
| 14 | GPS Coordinates | Latitude/Longitude | | |
| 15 | GPS in DMO | Enabled in Any DMO Mode | | |

- Status Profile

- GPS Event Location Enable set to TRUE (checked)
- GPS Event Timestamp Enable set to TRUE (checked)
- GPS LRRP Destination ISSI will be set to the Gateway's Radio ISSI value

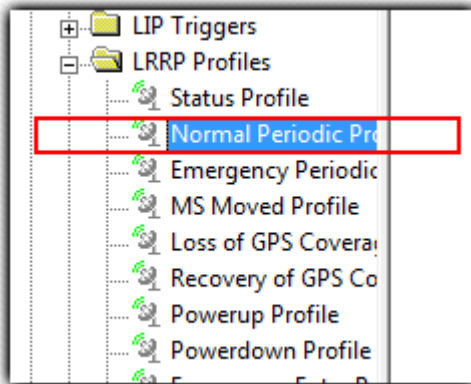


A screenshot of the configuration table for the Status Profile. The table has four columns: an index, Field Name, Field Value, and a Reset button. The first three rows are highlighted with a red border. A blue arrow points from the 'Status Profile' in the previous image to this table.

| | Field Name | Field Value | Reset |
|----|------------------------------------|-------------------------------------|-------|
| 1 | GPS Event Location Enable | <input checked="" type="checkbox"/> | |
| 2 | GPS Event Timestamp Enable | <input checked="" type="checkbox"/> | |
| 3 | GPS LRRP Destination ISSI | 8388610 | Reset |
| 4 | GPS LRRP Destination IP | 0. 0. 0. 0 | |
| 5 | GPS LRRP Remote Port | 1 | Reset |
| 6 | GPS LRRP Unsolicited Shape | SHAPE_2d | |
| 7 | GPS LRRP Unsolicited Velocity Type | SPEED_NONE | |
| 8 | GPS Unsolicited Uncertainty, m | 0 | Reset |
| 9 | GPS Max Data Age, sec | 20 | Reset |
| 10 | GPS Max Acquisition Delay, sec | 45 | Reset |

- Normal Periodic Profile

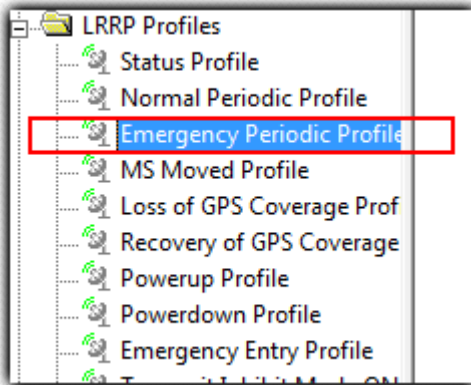
- GPS Event Location Enable set to TRUE (checked)
- GPS Event Timestamp Enable set to TRUE (checked)
- GPS LRRP Destination ISSI will be set to the Gateway's Radio ISSI value
- GPS Idle Report Period set to an integer value



| | Field Name | Field Value | Reset |
|----|------------------------------------|-------------------------------------|-------|
| 1 | GPS Event Location Enable | <input checked="" type="checkbox"/> | |
| 2 | GPS Event Timestamp Enable | <input checked="" type="checkbox"/> | |
| 3 | GPS LRRP Destination ISSI | 8388610 | Reset |
| 4 | GPS LRRP Destination IP | 0. 0. 0. 0 | |
| 5 | GPS LRRP Remote Port | 1 | Reset |
| 6 | GPS LRRP Unsolicited Shape | SHAPE_2d | |
| 7 | GPS LRRP Unsolicited Velocity Type | SPEED_NONE | |
| 8 | GPS Unsolicited Uncertainty, m | 0 | Reset |
| 9 | GPS Max Data Age, sec | 20 | Reset |
| 10 | GPS Max Acquisition Delay, sec | 45 | Reset |
| 11 | GPS Idle Report Period, sec | 45 | Reset |

•Emergency Periodic Profile

- GPS Event Location Enable set to TRUE (checked)
- GPS Event Timestamp Enable set to TRUE (checked)
- GPS LRRP Destination ISSI will be set to the Gateway's Radio ISSI value



| | Field Name | Field Value | Reset |
|----|------------------------------------|-------------------------------------|-------|
| 1 | GPS Event Location Enable | <input checked="" type="checkbox"/> | |
| 2 | GPS Event Timestamp Enable | <input checked="" type="checkbox"/> | |
| 3 | GPS LRRP Destination ISSI | 8388610 | Reset |
| 4 | GPS LRRP Destination IP | 0. 0. 0. 0 | |
| 5 | GPS LRRP Remote Port | 1 | Reset |
| 6 | GPS LRRP Unsolicited Shape | SHAPE_2d | |
| 7 | GPS LRRP Unsolicited Velocity Type | SPEED_NONE | |
| 8 | GPS Unsolicited Uncertainty, m | 0 | Reset |
| 9 | GPS Max Data Age, sec | 20 | Reset |
| 10 | GPS Max Acquisition Delay, sec | 20 | Reset |
| 11 | GPS Emergency Report Period, sec | 30 | Reset |

•Powerup Profile

- GPS Event Location Enable set to TRUE (checked)
- GPS Event Timestamp Enable set to TRUE (checked)
- GPS LRRP Destination ISSI will be set to the Gateway's Radio ISSI value

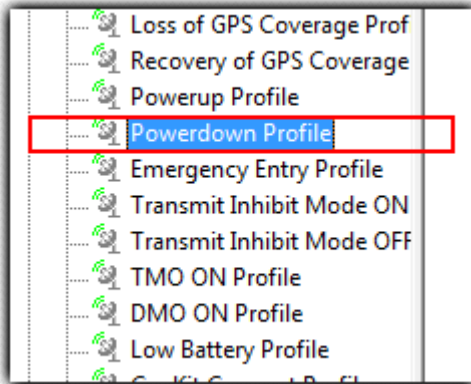
| |
|---------------------------|
| MS Moved Profile |
| Loss of GPS Coverage Prof |
| Recovery of GPS Coverage |
| Powerup Profile |
| Powerdown Profile |
| Emergency Entry Profile |
| Transmit Inhibit Mode ON |
| Transmit Inhibit Mode OFF |
| TMO ON Profile |
| DMO ON Profile |



| | Field Name | Field Value | Reset |
|----|------------------------------------|-------------------------------------|-------|
| 1 | GPS Event Location Enable | <input checked="" type="checkbox"/> | |
| 2 | GPS Event Timestamp Enable | <input checked="" type="checkbox"/> | |
| 3 | GPS LRRP Destination ISSI | 8388610 | Reset |
| 4 | GPS LRRP Destination IP | 0. 0. 0. 0 | |
| 5 | GPS LRRP Remote Port | 1 | Reset |
| 6 | GPS LRRP Unsolicited Shape | SHAPE_2d | |
| 7 | GPS LRRP Unsolicited Velocity Type | SPEED_NONE | |
| 8 | GPS Unsolicited Uncertainty, m | 0 | Reset |
| 9 | GPS Max Data Age, sec | 20 | Reset |
| 10 | GPS Max Acquisition Delay, sec | 180 | Reset |

•Powerdown Profile

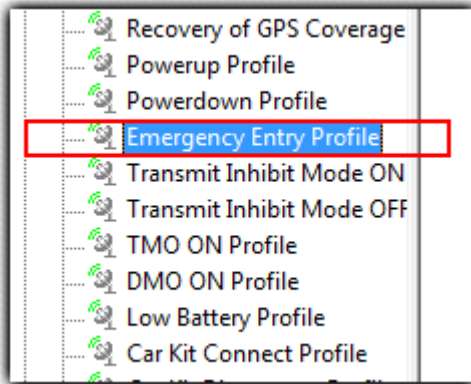
- GPS Event Location Enable set to TRUE (checked)
- GPS Event Timestamp Enable set to TRUE (checked)
- GPS LRRP Destination ISSI will be set to the Gateway's Radio ISSI value



| | Field Name | Field Value | Reset |
|----|------------------------------------|-------------------------------------|-------|
| 1 | GPS Event Location Enable | <input checked="" type="checkbox"/> | |
| 2 | GPS Event Timestamp Enable | <input checked="" type="checkbox"/> | |
| 3 | GPS LRRP Destination ISSI | 8388610 | Reset |
| 4 | GPS LRRP Destination IP | 0. 0. 0. 0 | |
| 5 | GPS LRRP Remote Port | 1 | Reset |
| 6 | GPS LRRP Unsolicited Shape | SHAPE_2d | |
| 7 | GPS LRRP Unsolicited Velocity Type | SPEED_NONE | |
| 8 | GPS Unsolicited Uncertainty, m | 0 | Reset |
| 9 | GPS Max Data Age, sec | 0 | Reset |
| 10 | GPS Max Acquisition Delay, sec | 0 | Reset |

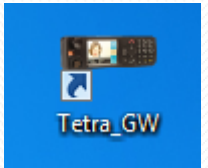
•Emergency Entry Profile

- GPS Event Location Enable set to TRUE (checked)
- GPS Event Timestamp Enable set to TRUE (checked)
- GPS LRRP Destination ISSI will be set to the Gateway's Radio ISSI value

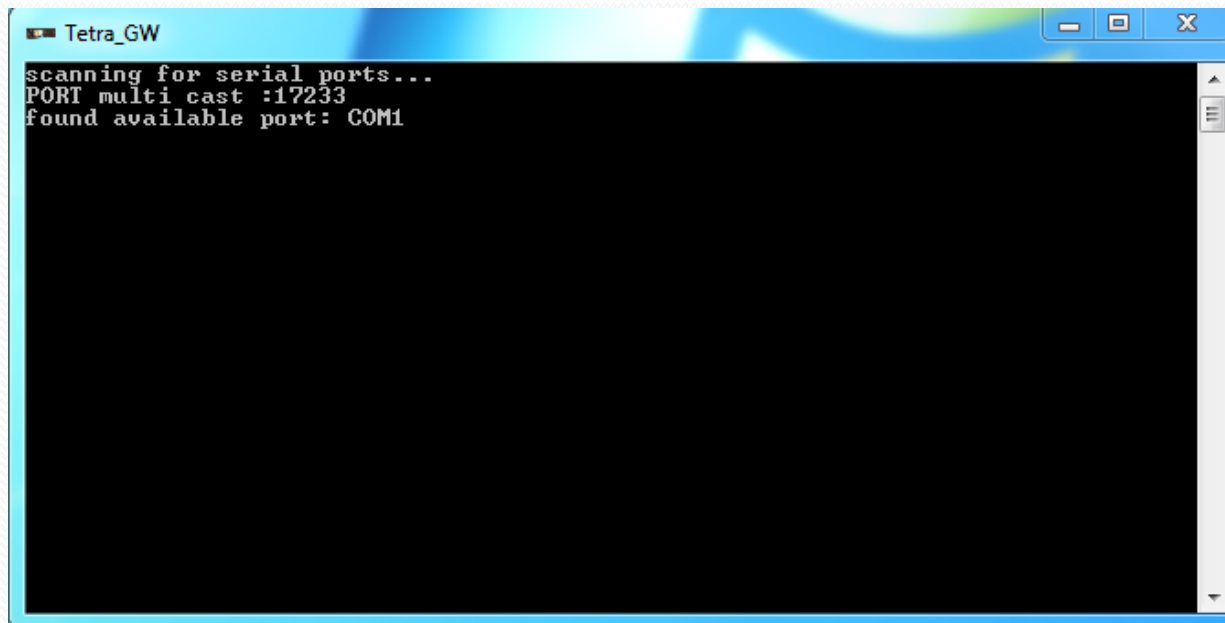


| | Field Name | Field Value | Reset |
|----|------------------------------------|-------------------------------------|-------|
| 1 | GPS Event Location Enable | <input checked="" type="checkbox"/> | |
| 2 | GPS Event Timestamp Enable | <input checked="" type="checkbox"/> | |
| 3 | GPS LRRP Destination ISSI | 8388610 | Reset |
| 4 | GPS LRRP Destination IP | 0. 0. 0. 0 | |
| 5 | GPS LRRP Remote Port | 1 | Reset |
| 6 | GPS LRRP Unsolicited Shape | SHAPE_2d | |
| 7 | GPS LRRP Unsolicited Velocity Type | SPEED_NONE | |
| 8 | GPS Unsolicited Uncertainty, m | 0 | Reset |
| 9 | GPS Max Data Age, sec | 20 | Reset |
| 10 | GPS Max Acquisition Delay, sec | 45 | Reset |

To start the Tetra Gateway program, you will double click the Tetra-GW shortcut.

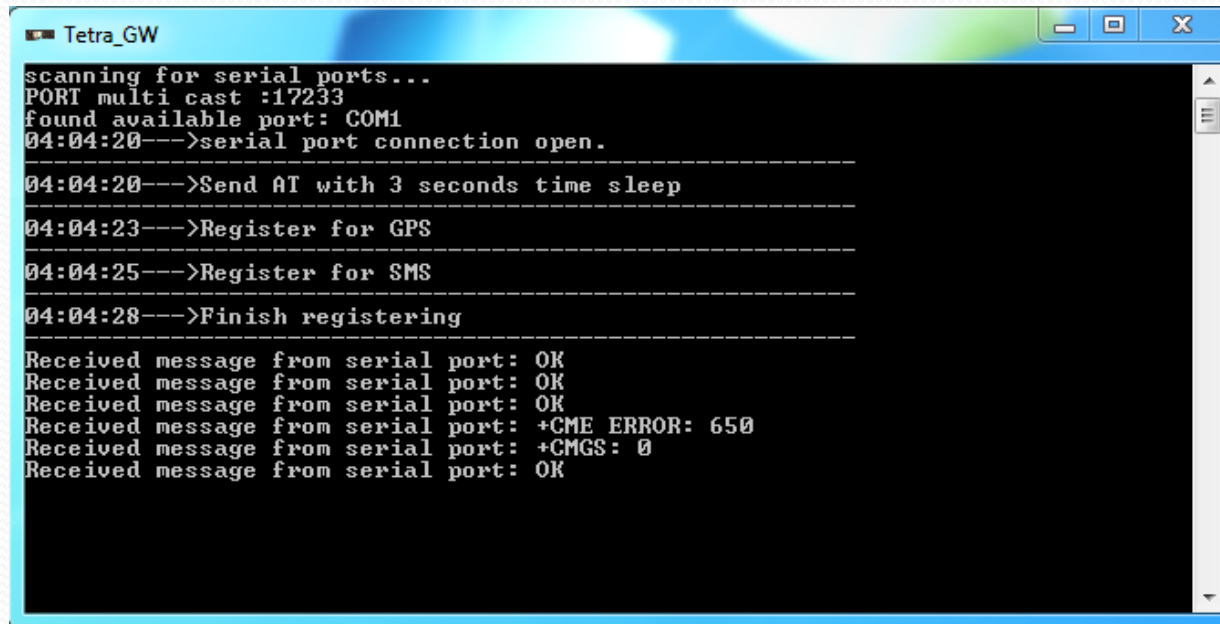


In the opened window, you will click Connect, after you have selected the serial communication port.



Tetra Gateway console when disconnected. It shows the available ports (the ports for connected stations).

After connecting the station, the gateway console will display messages about the state of gateway connection, gps , sms and others.



```
Tetra_GW
scanning for serial ports...
PORT multi cast :17233
found available port: COM1
04:04:20-->serial port connection open.
-----
04:04:20-->Send AT with 3 seconds time sleep
-----
04:04:23-->Register for GPS
-----
04:04:25-->Register for SMS
-----
04:04:28-->Finish registering
-----
Received message from serial port: OK
Received message from serial port: OK
Received message from serial port: OK
Received message from serial port: +CME ERROR: 650
Received message from serial port: +CMGS: 0
Received message from serial port: OK
```

To close the Tetra Gateway program, you will click the Disconnect button.

