Ntrip Modem TP688
Industrial Modem for Ntrip Corrections

Overview
The Ntrip Modem TP688 is an industrial modem ideal for Ntrip corrections. It equips built-in industrial 4G wireless communication module, built-in 2600mAh battery, RS232 serial port, mounting handle, SIM card slot and high-speed data transmission module. It is a cost-effective industrial wireless modem.

The TP688 supports Ntrip protocol, and it can be used in Ntrip server mode and Ntrip client mode. The Ntrip function is configured by RS232 serial port and text message.

Key Features
- Industrial design and IP67-rated protection
- Industrial component ARM and modules
- Serial data transfer and wide voltage input
- Low power consumption
- Long-lasting operation with built-in 2600mAh battery
- Supports global 2G/3G/4G network
- Supports DNS proxy
- Supports NTRIP
- Ease of configure, use and maintain
# Technical Specifications

## Performance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>5V~36V DC</td>
</tr>
<tr>
<td>Operating Current</td>
<td>125mA @ +12V DC</td>
</tr>
<tr>
<td>Standby Current</td>
<td>90mA @ +12V DC</td>
</tr>
<tr>
<td>Power Consumption (typical)</td>
<td>1.5W</td>
</tr>
<tr>
<td>Battery</td>
<td>2600 mAh</td>
</tr>
<tr>
<td>Charging time</td>
<td>3.5 hours</td>
</tr>
<tr>
<td>Operating hours (typical)</td>
<td>18 hours</td>
</tr>
</tbody>
</table>

## Physical

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>160x102x37mm (w/o connectors)</td>
</tr>
<tr>
<td>Weight</td>
<td>650g</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C ~ +85°C</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>95% @ +40°C</td>
</tr>
</tbody>
</table>

## Interfaces

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Port</td>
<td>RS232 x1</td>
</tr>
<tr>
<td>Antenna Connector</td>
<td>SMA Female x1</td>
</tr>
<tr>
<td>Power Connector</td>
<td>2pin LEMO</td>
</tr>
</tbody>
</table>

## Communication

### Network:

**Chinese version:**
- 2G: GSM/GPRS/EDGE/CDMA2000 1x
- 3G: UMTS/WCDMA/HDSPA/HSPA+/TD-SCDMA/CDMA2000 EVDO
- 4G: TDD-LTE/FDD-LTE

**Eurasian version** (Europe, Middle East, Africa, South Korea, Thailand):
- 2G: GSM/GPRS/EDGE
- 3G: UMTS/WCDMA/HDSPA/HSPA+
- 4G: TDD-LTE/FDD-LTE

**North American version:**
- 3G: UMTS/WCDMA/HDSPA/HSPA+
- 4G: FDD-LTE

**Australian version** (New Zealand, Australia, South America):
- 2G: GSM
- 3G: WCDMA
- 4G: FDD-LTE/TDD-LTE

**Operating Frequency Band (Chinese version):**
- TDD-LTE B38/B39/B40/B41
- FDD-LTE B1/B3/B8
- UMTS/HSDPA/HSPA+ B1/B8
- TD-SCDMA B34/B39
- CDMA2000 1x/EVDO BC0
- GSM/GPRS/EDGE 900/1800 MHz

**Eurasian version:**
- TDD-LTE B38/B40
- FDD-LTE B1/B3/B7/B8/B20
- UMTS/HSDPA/HSPA+ B1/B8
- GSM/GPRS/EDGE 900/1800 MHz

**North American version:**
- FDD-LTE B2/B4/B5/B17
- UMTS/HSDPA/HSPA+ B2/B5

**Australian version:**
- TDD-LTE B40
- WCDMA B1/B2/B5/B8
- GSM 850/900/1800/1900