

# TH-680



| Type                     | Parameter Item   | Specification  |             |
|--------------------------|--|--|-------------|
| Mechanical Properties    | Model No.  | TH - 680   |             |
|                          | Dimension  | 38 ( H ) × 58 ( W ) × 135 ( L ) mm   |             |
|                          | Weight   | 320g   |             |
|                          | Working Temperature  | -30°C to +75°C   |             |
| Basic Parameter          | Working Voltage  | 6.4V ~ 8.4V (Standard 7.6V)  |             |
|                          | Working Current  | 310mA @ UTMS 2100/900<br>280mA @ GSM 900   |             |
|                          | Peak Current   | 1.8A   |             |
| WCDMA & GSM RF Parameter | LTE FDD<br>(Have multiple versions of LTE Bands for different countries) | Band 1: 2100MHz    Band 3: 1800MHz<br>Band 7: 2600MHz    Band 8: 900MHz<br>Band 20: 800MHz   |             |
|                          | WCDMA  | Band1 : 2100M    OR    Band5 : 850M<br>Band8 : 900M       Band2 : 1900M  |             |
|                          | GSM  | GSM/GPRS : 900M /1800M   |             |
|                          | Maximum Output power   | WCDMA 900 /2100MHz : Power Class 3 (+24dBm +2.5dBm /-1.5dBm);<br>GSM/GPRS 850 /900 MHz : Power Class 4 (+33dBm +2.5 dBm /-0.5 dBm);<br>GSM/GPRS 1800 /1900 MHz : Power Class1 (+30dBm +2.5 dBm /-0.5 dBm); |             |
|                          | Receiving Sensitivity  | WCDMA 900 : ≤-108 dBm;<br>WCDMA 2100 : ≤-109 dBm;<br>GSM850 /900 /1800 /1900 : ≤-106 dBm;  |             |
| GPS                      | GPS  | GPS Positioning, 1.57542GHz;   |             |
|                          | Sensitivity  | Catch -144dBm, Track -159dBm;  |             |
| Technology Standard      | Data Speed Rate  | GSM CS : UL 9.6kpbs / DL 9.6kpbs<br>GPRS : Multi-slot Class 10<br>EDGE : Multi-slot Class 12<br>WCDMA CS : UL 64kpbs / DL 64kpbs<br>WCDMA PS : UL 384kpbs / DL 384kpbs                                     |             |
|                          | Protocol   | HSDPA / WCDMA / EDGE / GPRS / GSM  |             |
| Analog Parameter         | <b>GENERAL</b>   |  |             |
|                          | Frequency Range  | UHF : 400-480MHz OR<br>VHF : 136-174MHz or 240-260MHz  |             |
|                          | Channel Number   | 199  |             |
|                          | Channel Space  | 25 /12.5KHz  |             |
|                          | Frequency Stability  | ±2.5 ppm   |             |
|                          | <b>TRANSMITTER</b>   |  |             |
|                          |  | Wide band  | Narrow band |
|                          | Power Output   | 5W   |             |
|                          | Modulation   | 16KΦF3E  | 11KΦF3E     |
|                          | Spurious Emission  | ≤ -36dBm   | ≤ -36dBm    |
|                          | Adjacent Channel Power   | ≥ 70dB   | ≥ 60dB      |
|                          | <b>RECEIVE</b>   |  |             |
|                          | RF Sensitivity (12db SINAD)  | 0.20 μV  | 0.20 μV     |
|                          | Adiacent Channel Selectivity   | ≥ 60dB   | ≥ 55dB      |
|                          | Intermodulation Rejection  | ≥ 65dB   | ≥ 60dB      |
| Spurious Response        | ≥ 65dB   | ≥ 65dB   |             |