

ET-3G UC20 (P-ET-A-00511)

3G 800/850/900/1900/  
2100 MHz

GSM 850/900/1800/  
1900 MHz



Specification of MODULE UC20G

- Be Module from QUECTEL
- Be compatible with network of UMTS/ HSPA+ and GSM/ GPRS/ EDGE
- Support Frequency in 3G(UMTS) network 800// 850/ 900/ 1900/ 2100 MHz
- Support Frequency in GSM network 850/ 900/ 1800/ 1900 MHz
- Maximum transmission of data: HSPA+ MAX 14.4 Mbps(DL)/ MAX 5.76 Mbps(UL)
- Support Protocol PPP/ TCP/ UDP/ FTP/ HTTP/ FILE/ MMS/ SMTP/ SSL/ PING
- Support AT COMMAND (COMPLIANT WITH 3GPP TS27.007, 27.005 and QUECTEL ENHANCED AT)
- Support navigation by satellite (GNSS); it is compatible with GPS (USA) and GLONASS (RUSSIA). It uses Chip GPSONE GEN8 from QUALCOMM, Protocol NMEA0183; it has to be used with ACTIVE Antenna and Power Supply 3.3V.
- INTERFACE
  - AUDIO DIGITAL AUDIO THROUGH PCM INTERFACE
  - USB 2.0 HIGH SPEED
  - UART 1 x FULL FUNCTION, 1 x DEBUG
  - ADC x 2, 15 BITS
  - RTC BACKUP REAL TIME CLOCK

ET-3G UC20 is the latest board from ETT for learning and developing the communication by mobile telephone. It uses Module UMTS/ HSPA+ UC20G from QUECTEL. It is compatible with 3G network and GSM network; moreover, there is its own GNSS network that can be compatible with GPS and GLONASS.

● Have Convertor circuit to convert LOGIC TTL from 3V to 5V. It can connect with Board Microcontroller LOGIC 5V directly if user does not need to connect through LINE DRIVER RS232.

● Have LINE DRIVER RS232 in case of connecting Board Microcontroller to ET-3G UC20 through PORT RS232 (9600-921600 bps) by Connector DB9 PIN FEMALE and Connector 4PIN ETT on board.

● Have PORT USB 2.0 (HEADER TYPE B) for communicating PORT USB to computer PC running on WINDOWS XP/VISTRA/7/8

● Have SW.ON/OFF to enable/disable operation of Module internal board

● Have SW.RESET to reset operation of Module internal board

● Have 2 REGULATE Circuits, it is compatible with external Power Supply 5VDC 2A and higher

- Use 3.88V/3A REGULATE Circuit to supply power to Module.

- Use 3.3V/200mA REGULATE Circuit to supply power to circuits external Module.

● Have LED to show operational status; VBAT, STATUS, SLEEP, NET MODE, NET STATUS

● Have Connector to interface with HANDSET (the part of land line to speak into and listen to), it is Connector RJ11 for speaking into

● Have Connector PORT DB9 PIN FEMALE and Connector 4 PIN ETT; 1 PORT is used as PORT RS232 and another1 PORT is used as DEBUG.

● Have 2 of Connector 10 PIN IDE from ETT to connect with PORT of Board Controller directly to send/receive data instead of PORT RS232 and it reads values and controls Module.

● Have JACK 3.5 mm. to connect with Microphone and earphone.

● Have SOCKET SIM as FULL SIZE SIM type; it supports SIM CARD 1.8V and 3.3V; moreover, there is ESD Circuit to protect SIM from damaged.

● Have 2 of SMA JACK to interface antenna of mobile phone and antenna of navigation by satellite (GNSS)

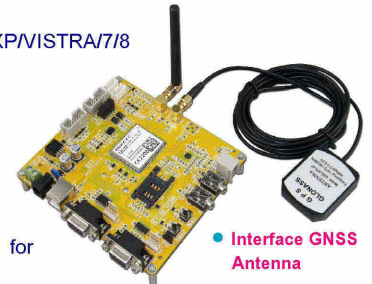
● Use POWER SUPPLY 5-12VDC for board that is Connector DC JACK 2.5 mm. (anode-outer and cathode-inner) and Connector 2 PIN TERMINAL BLOCK.

**NOTE:** It should use POWER SUPPLY of ETT "ET-SWITCHING ADAPTER 5V 2A TYPE J" (A-AP-A-00093).

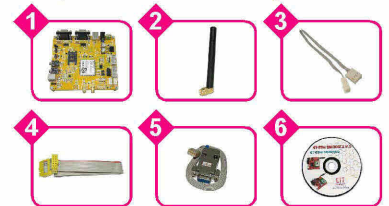
● Board size: 12.6 x 11.3 cm.

● ET-3G UC20 consists of ...

1. Board and MODULE UC20G
2. Antenna as L-TYPE using Frequency 800/850/900/1900/2100 MHz
3. Connector 4 PIN RS232
4. Pair Cable 10 PIN
5. Cable ET-RS232 DB9 PIN F
6. CD-ROM Manual and Program



● Interface GNSS Antenna



OPTION

● ET-SWITCHING ADAPTER 5V 2A TYPE J (A-AP-A-00093)



Under TISI Standards and UL  
INPUT : AC INPUT 220VAC 50/60Hz 0.5A  
OUTPUT : DC 5V/2.0A (10W)

● GPS+GLONASS ANTENNA (A-IC-M-00045)

It is used with satellite in the system of GPS and GLONASS.



● GPS ANTENNA (A-IC-M-00027)

It is used with satellite in the system of GPS.



● CABLE USB 2.0 AM/BM 1.8M (A-CB-A-00043)

