

## Model : UDT-TV-02 / UDT-MT-02

### SMS AND GPRS MODE PROTOCOL

#### 1.SMS Mode:

##### Data format:

**Lat:** +22.50500-----Latitude Direction (+/-) Latitude Value (Accuracy for 5 after the decimal point)  
**Long:** +114.01000-----Longitude Direction (+/-) Longitude Value (Accuracy for 5 after the decimal point)  
**Speed:** 0.00KM/H-----Speed KM/H (Accuracy for 2 after the decimal point)  
**Direction:** 315.00 -----(Accuracy for 2 after the decimal point)  
**Date:** 2008-04-25 -----Date YYYY-MM-DD  
**Time:** 16:39:45-----Time HH: MM: SS (GMT)  
**BS:** 25ee0dff -----Base Station information  
**Fix:** A-----Location state (A/V).....A=data valid , V=data not valid  
**ID:** 353686009002030---IMEI Number  
**STATE:** SMS-----Message state(explain by follow)

**Note:** If in the cold start and GPS is not fix, it will return the void information:

**ERROR GPS GPRMC FRAME DATA**

**BS: 27971054".**

**ID: 353686009002030**

**STATE: SMS**

##### STATE:

**SMS**-----send 6660000 to tracker for getting position , it will reply sms with sms state

**TIMER**--- Send the position information in fixed time

**CALL**----- when somebody call the gps tracker, and no answer, it will reply sms with call state

**SOS**-----when press SOS button, it will send sms with sos state to the presorted number

**ANSWER**---- when somebody call the gps tracker, and answer, it will reply sms with call state

**OS**-----when over GEOFENCE

**RS**-----when come back to GEOFENCE

**LP----- Low voltage warning**

**AUTO----- Engine is Open, ACC is ON**

**AUTOLOW----- Engine is Close, ACC is Off**

**DEF----- Cut the power wire, it will upload with “DEF” state**

**OVER SPEED----- When the tracker speed over the set,it will upload with “OVER SPEED” state**

**AUTO START----- When the engine is Open, ACC is ON, it will upload with “ATUO START” state**

**AUTO STOP----- When the engine is Cloes, ACC is OFF, it will upload with “ATUO STOP” state.**

**ACC OS----- Move alarm ,When the car engine is Cloes the car is moving.**

**ACC RS----- Move alarm ,When the car engine is Cloes the car is move back**

**Notice:** ALL SMS are sent to cell phone number

## GPRS Mode:

### TCP/IP PROTOCOL

#IMEI # user name #service password #State# data quantity

#the base station's information \$ GPRMC.....

#the base station's information \$ GPRMC..... ##

eg:

#123456789000001#V3338#0000#SMS#3

#25ee0dff\$GPRMC,083945.180,A,2233.4249,N,11406.0046,E,0.00,315.00,251207,,A\*6E

#25ee0dff\$GPRMC,083950.180,A,2233.4249,N,11406.0046,E,0.00,315.00,251207,,A\*6E

#25ee0dff\$GPRMC,083955.180,A,2233.4249,N,11406.0046,E,0.00,315.00,251207,,A\*6E ##

### RMC Data Format

\$GPRMC,161229.487,A,3723.2475,N,12158.3416,W,0.13,309.62,120598, ,\*10

| Name               | Example    | Units   | Description                      |
|--------------------|------------|---------|----------------------------------|
| Message ID         | \$GPRMC    |         | RMC protocol header              |
| UTC Time           | 161229.487 |         | hhmmss.sss                       |
| Status1.           | A          |         | A=data valid or V=data not valid |
| Latitude           | 3723.2475  |         | ddmm.mmmm                        |
| N/S Indicator      | N          |         | N=north or S=south               |
| Longitude          | 12158.3416 |         | dddmm.mmmm                       |
| E/W Indicator      | W          |         | E=east or W=west                 |
| Speed Over Ground  | 0.13       | knots   | 1knots=1.852km/h                 |
| Course Over Ground | 309.62     | degrees | True                             |
| Date               | 120598     |         | ddmmyy                           |
| Magnetic Variation |            | degrees | E=east or W=west                 |
| Mode               | A          |         | A=Autonomous, D=DGPS, E=DR       |

|           |        |                            |
|-----------|--------|----------------------------|
| Checksum  | *10    |                            |
| <CR> <LF> |        | End of message termination |
| ACC       | AUTO   | ACC ON, Engine Open        |
| ACC       | AUTOLO | ACC OFF, Engine Close      |
|           | W      |                            |

**STATE:**

**SMS**----- Upload the location instruction at once, send #806#user password## to upload data to server

**AUTO**--- **Send the position information in fixed time to server, and the ACC is ON, engine is Open**

**CALL**----- when somebody call the gps tracker, and no answer, it will upload with call state

**SOS**-----when press SOS button, it will send data with sos to server

**ANSWER**--- when somebody call the tracker, and answer, it will upload data to server with call state

**OS**-----when over GEOFENCE

**RS**-----when come back to GEOFENCE

**AUTO**----- **Engine is Open, ACC is ON**

**AUTOLOW**----- **Engine is Close, ACC is Off**

**STORAGE**-----**Upload the location data in the tracker**

**DEF**-----**Cut the power wire, it will upload with “DEF” state**

**LP**-----When the power low, it will upload with “LP” state

**OVER SPEED**-----When the tracker speed over the set,it will upload with “OVER SPEED” state

**ATUO START**-----Wher the **engine is Open, ACC is ON**, it will upload with “ATUO START” state

**AUTO STOP**----- When the **engine is Cloes, ACC is OFF**, it will upload with “ATUO STOP” state.

**ACC OS**-----Move alarm ,When the car **engine is Cloes** the car is moving.

**ACC RS**----- Move alarm ,When the car **engine is Cloes** the car is move back.