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 “AUTO START” state
AUTO STOP-------- When the engine is Close, ACC is OFF, it will upload with “AUTO STOP” state.

ACC OS---------- Move alarm, When the car engine is Close, the car is moving.
ACC RS---------- Move alarm, When the car engine is Close, the car is move back.
Notice: ALL SMS are sent to cell phone number

GPRS Mode:
TCP/IP PROTOCOL
#IMEI # 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

<table>
<thead>
<tr>
<th>Name</th>
<th>Example</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message ID</td>
<td>$GPRMC</td>
<td></td>
<td>RMC protocol header</td>
</tr>
<tr>
<td>UTC Time</td>
<td>161229.487</td>
<td>hhmmss.sss</td>
<td></td>
</tr>
<tr>
<td>Status1.</td>
<td>A</td>
<td>A=data valid or V=data not valid</td>
<td></td>
</tr>
<tr>
<td>Latitude</td>
<td>3723.2475</td>
<td>ddmm.mmmm</td>
<td></td>
</tr>
<tr>
<td>N/S Indicator</td>
<td>N</td>
<td>N=north or S=south</td>
<td></td>
</tr>
<tr>
<td>Longitude</td>
<td>12158.3416</td>
<td>dddmm.mmmm</td>
<td></td>
</tr>
<tr>
<td>E/W Indicator</td>
<td>W</td>
<td>E=east or W=west</td>
<td></td>
</tr>
<tr>
<td>Speed Over Ground</td>
<td>0.13</td>
<td>knots</td>
<td>1 knots = 1.852 km/h</td>
</tr>
<tr>
<td>Course Over Ground</td>
<td>309.62</td>
<td>degrees</td>
<td>True</td>
</tr>
<tr>
<td>Date</td>
<td>120598</td>
<td>ddmmmyy</td>
<td></td>
</tr>
<tr>
<td>Magnetic Variation</td>
<td>A</td>
<td>degrees</td>
<td>E=east or W=west</td>
</tr>
<tr>
<td>Mode</td>
<td>A</td>
<td></td>
<td>A=Autonomous, D=DGPS, E=DR</td>
</tr>
</tbody>
</table>
Checksum  *10  
<CR> <LF>  
End of message termination  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>AUTO</td>
</tr>
<tr>
<td>ACC</td>
<td>AUTOLO</td>
</tr>
<tr>
<td>W</td>
<td></td>
</tr>
</tbody>
</table>

**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, engineer 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  
**AUTOLO**------ 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**------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.