Komunikace s GPS modulem PA6H

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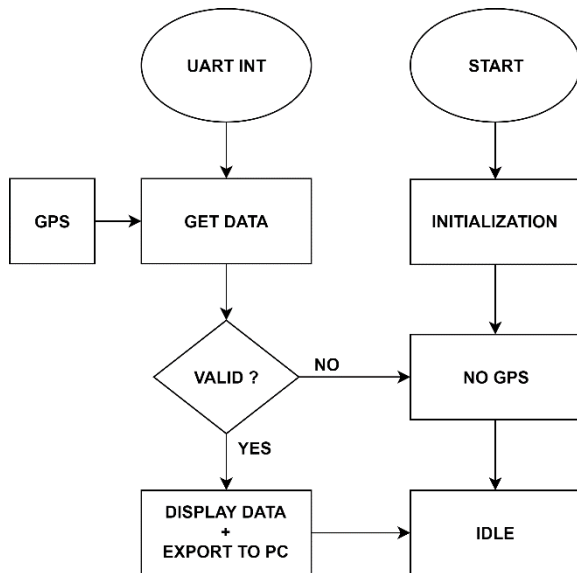
NMEA data

- GPGGA (GPS Fix Data)
- GPGSA (GPS DOP and active satellites)
- GPRMC (Recommended minimum specific GPS data)
- GPVTG (Track made good and ground speed)
- GPGSV (GPS Satellites in view)

```
$GPGGA,080454.000,4913.6219,N,01634.4144,E,1,6,2.13,287.1,M,43.5,M,,*5F
$GPGSA,A,3,01,03,23,11,19,17,,,,,,,2.32,2.13,0.94*01
$GPGSV,4,1,13,01,75,146,31,03,64,276,25,11,54,185,31,17,34,302,21*75
$GPGSV,4,2,13,39,32,168,,23,28,205,30,31,24,092,14,19,21,319,16*7B
$GPGSV,4,3,13,32,16,046,,08,03,182,,09,01,213,,22,,,25*47
$GPGSV,4,4,13,14,,,29*75
$GPRMC,080454.000,A,4913.6219,N,01634.4144,E,3.47,339.04,271119,,,A*65
$GPVTG,339.04,T,,M,3.47,N,6.42,K,A*30
```

Zpracovávané a zobrazované data

- Čas (UTC)
- Zeměpisná šířka, délka (převod formátu na D.DDDDD°)
- Rychlost (km/h)
- Výška (m)
- Počet aktivních satelitů
- Kontrola správnosti dat pomocí checksum

```
$GPGGA,080454.000,4913.6219,N,01634.4144,E,1,6,2.13,287.1,M,43.5,M,,*5F
$GPGSA,A,3,01,03,23,11,19,17,,,,,,,2.32,2.13,0.94*01
$GPGSV,4,1,13,01,75,146,31,03,64,276,25,11,54,185,31,17,34,302,21*75
$GPGSV,4,2,13,39,32,168,,23,28,205,30,31,24,092,14,19,21,319,16*7B
$GPGSV,4,3,13,32,16,046,,08,03,182,,09,01,213,,22,,,25*47
$GPGSV,4,4,13,14,,,29*75
$GPRMC,080454.000,A,4913.6219,N,01634.4144,E,3.47,339.04,271119,,,A*65
$GPVTG,339.04,T,,M,3.47,N,6.42,K,A*30
```

- UART
- *.csv

```
Time,Latitude,Longitude,Speed[km/h],Altitude[m],Active_Satelites,
14:36:10,+49.226879,+16.573978,0.45,296.8,5,
14:36:11,+49.226883,+16.573971,0.03,297.3,5,
14:36:12,+49.226883,+16.573967,0.15,297.6,5,
14:36:13,+49.226883,+16.573963,0.11,297.6,5,
14:36:14,+49.226883,+16.573963,0.24,297.7,5,
14:36:15,+49.226883,+16.573965,0.29,297.7,5,
14:36:16,+49.226883,+16.573963,0.12,297.7,5,
14:36:17,+49.226883,+16.573963,0.10,297.7,5,
14:36:18,+49.226883,+16.573961,0.12,297.7,5,
```

- Mapa   Video

Děkujeme za pozornost