

GPS DATA MODULE AND ENCODER



An application specific GPS receiver module and FSK encoder. The device outputs dynamic GPS serial data messages in NMEA format converted to FSK audio tone modulation. This device enables GPS data to be relayed via a wireless video link to the ground receiving systems via the audio channels simultaneously with the video.

The data o/p is also supplied in RS232 format for connecting to external instruments e.g. Flir camera for symbology information. The module has an external antenna feed.

Using standard input dc power (9 to 30 volts dc) it is ideally suited to digital video link systems using standard audio data channels for the GPS relay.

Specifications

Receiver Type	L1 frequency, C/A code, 32 Channels
Position Accuracy	3.3m CEP
Update Rate	1Hz
Sensitivity	Acquisition -140dBm
Tracking	-149dBm

Data Protocol

RS232 NMEA, 0183 ASCII 4800 Baud
FSK Tone modulation ~ 5KHz line level

Default messages (with sample data)

```
$GPGLL, 5226.12614, N, 00101.89626, W, 091809.00, A, A*72  
$GPRMC,091810.00,A,5226.12611,N,00101.89626,W,0.028,20.33,031105,,A*46  
$GPGGA,091810.00,5226.12611,N,00101.89626,W,1,7,1.07,167.2,M,47.3,M,,*79  
$GPZDA, 091809.00, 03, 11, 2005, 00, 00*6B
```

Mechanical

Dimensions

Length	100mm
Width	80mm
Height	15mm

Weight

50g (approx)

Environment

Operating Temperature	- 40°C ~ 85°C
Storage Temperature	- 40°C ~ 125°C

