

physical

Dimensions	112mm(diam) x 45.75mm(height) (Does not include mounting threads/extensions)
Weight	350g
Colour	UN0332 (Coconut)
Connector	12 way plug. Bulgin 400 Series Buccaneer compatible

environmental

Temperature	-40°C to +70°C
Humidity	≤ 95% @ +40°C
Vibration	5-20Hz: 1.92m ² s ⁻³ random noise 20-500Hz: -3dB octave random noise
Shock (survival)	Half sine 6ms, 300ms ⁻²
Ingress Protection Rating	IP66 (when interface connector appropriately mated)

frequency range

Transmit	1626.5 MHz to 1660.5 MHz
Receive	1525.0 MHz to 1559.0 MHz
GPS	1575.42 ± 1.0 MHz

elevation angle range

0° to 90°

transmitter

EIRP	0 - 9 dBW
Modulation	2 level FSK, 256Hz tone spacing
Tx burst duration	8s (Global Beam)
User data rate	~10 bits per second (Global beam)
Message length	Up to 84 bits per burst

receiver

G/T	≥ -25dB/K at EL = 30°
Modulation	32-ary FSK, 20Hz tone spacing
User data rate	~9 bits per second
Message length	Up to 1000 bits

GPS

Channels	12
Time To First Fix (Typical)	
Cold start	45s
Hot start	<8s (GPS was off for less than 2 hours)
Accuracy (SA Off)	
Position (CEP, 2D)	4m (Typical)
Altitude	maximum 18000m
Dynamic capability	
Velocity	maximum 515m/s
Acceleration	≤ 4g
Maximum update rate	1s

GPS test interface

(not available during normal operation)

Interface	Asynchronous serial RS232
Baud rate	38400 bps
Parity/data bits/stop bits	N,8,1

control & monitoring

Interface	Asynchronous serial RS232
Baud rate	9600 bps
Parity/data bits/stop bits	N,8,1

data interfaces

2 x Inputs	Individually configurable as: <ul style="list-style-type: none">• Digital input (32V maximum)• Switch input (internal pull up used with external switch to ground)• SAT 101 compatible I/O (low voltage)• Analog input (12 bit ADC, 0 to 2.5V)
2 x Outputs	Open drain output (250mA max sink current)

power consumption (typical@12V)

Sleep	0.5mW
Receive (incl. GPS)	1.5W
Transmit	5W

power supply voltage

9.6V to 32V 'smoothed' DC