

# specification

## SAT-201i-LRIT

long range identification  
and tracking



Product code A121B01

### Physical

<b>Dimensions</b>	112 mm x 45.75 mm (diameter x height)
<b>Weight</b>	350g

### Environmental

<b>Temperature</b>	-40C to +70C (requires special cable below -25C)
<b>Marine</b>	Climatic, Shock & Vibration EN60945: 2002
<b>Ingress Protection</b>	IP66

### Power Supply Requirements

<b>Supply Voltage</b>	10V to 32V DC
<b>Power Consumption (typical @ 12V)</b>	
Receive (incl. GPS)	1.5W
Transmit	6W

### Communication

<b>Frequency Range</b>	
Transmit	1626.5 MHz to 1660.5 MHz
Receive	1525.0 MHz to 1559.0 MHz
GPS	1575.42 ± 1.0 MHz
<b>Elevation Angle</b>	0° to 90°
<b>Transmitter</b>	
EIRP	0 - 9dBW
Modulation	2 level FSK, 256Hz tone spacing
Tx burst duration	2s or 8s
<b>Receiver</b>	
G/T	≥ -25dB/K at EL = 30°
Modulation	32-ary FSK, 32Hz tone spacing
User data rate	~36 bits per second

### GPS

<b>Sensitivity</b>	-159dBm (Tracking)
<b>Channels</b>	20
<b>Time To First Fix (Typical)</b>	
Cold start	<35s
Hot start	<1s (GPS was off for less than 2 hours)
<b>Accuracy (SA Off)</b>	
Position (CEP, 2D)	2.5m (Typical)
<b>Dynamic Capability</b>	
Maximum update rate	1s

### Control & Monitoring

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

### Certification

Inmarsat Type Approved  
FCC Compliant  
EN60945  
CE