

FR32 Specifications

Physical Specifications

Housing

Black PC/ABS plastic
5.75" x 3" x 1" (145 x 78 x 25mm)

Weight

0.4 lbs (180g)

Connections

8 pin system connector with two outputs and two inputs
SMB female GPS antenna connector

Antennas

Cellular: Internal, no external connection
GPS Internal: no external connection required
GPS external: optional active GPS antenna, 50 ohm, SMB male connector, 3 -5V, 27dB.

Temperature

-20 to +70 C operating
-40 to +85 C storage
Internal battery is thermally protected from over and under temperature conditions.

Humidity

Up to 95% non-condensing.

Vibration and Shock

Random sine wave vibration tested for 30 minutes.
1 meter drop test according to JESD22-B111.

Electrical Specifications

Input Voltage

12 volts DC nominal
11.5 – 18.5 volts DC operating
30 Volts maximum

Input Current @12V

25 mA steady state maximum
750 mA maximum when internal battery charging

Internal Battery

Charge time: 30 minutes.
Discharge time: 5 hours typical, 8 hours maximum.

Lifetime: 5 years or 500 cycles.

Battery recharges automatically when power is replaced to unit.

Battery charging automatically stops below 11.5V.

Lifetime 5 years or 500 cycles.

Electrostatic Discharge

ESD testing performed using the Human Body Model class 3B (8000 volts) and the Charged Device Model class C7 (2000 volts).

Standards and Approvals

GSM Specification

Dual band 850/1900Mhz, North America GSM bands.

Output Power: 850Mhz (Class 4) 2W, 1900Mhz (Class1): 1W.

GSM Release 99 compliant.

Data Supported: SMS mobile terminated (MT) class 0-2, mobile originating (MO) class 0-3.

GPS Specification

12- channel receiver.

Navigation sensitivity-156 dBm.

Time to first fix (TTFF): 2 min typical with internal antenna, 1min typical with external GPS antenna.

Last known good location storage.

Approvals

GSM2218

FCC: Parts 15,22,24. FCC part 22 and part 24 are covered by the “modular approval” process for a transmitter. This approach, described by FCC Public Notice DA 00-131407 released June 26, 2000, is intended to afford relief to equipment manufacturers by eliminating the requirement for obtaining a new equipment authorization for the same transmitter when installed in a new device. In order to use the FR32 without additional FCC certification approvals, the installer must meet the following conditions:

For the transmitter to meet the MPE categorical exclusion requirements of 2.1091, the ERP must be less than 1.5 watts for personnel separation distance of at least 20 cm (8.0 inches). Therefore, do not install this device within 8 inches of the personnel.

PTCRB: Version 2.7.2

Industry Canada

R&TTE

The FR32 has been fully tested and complies with all the requirements of NE301 489-1, EN301 489-7 and EN60950-1: 2001.

Carrier specific compatibility: AT&T, Beyond Wireless, Cellular One, Centennial Wireless, Chinook Wireless, Cincinnati Bell, Corr Wireless, EDGE Wireless, EinsteinPCS, Immix Wireless, Simmetry Communications, SunCom Wireless, T-Mobile, Unice Wireless, Viaero Wireless, i wireless

Installation

Quick connect power cable.
Optional external GSP antenna.
Automatic test locate.

Status Indicator Light

Tricolor LED provides device status

No light = Bad power connection or voltage less than 11.5V
Ice/Glacier = No external power, unit operating from internal battery
Green Flash = Good
Green Solid = No cellular service
Blue Flash = No GPS fix
Blue Solid = No GPS and no cellular
Orange = Cellular modem failure
Red Solid/Flash = Hardware failure

Customer Service

Live customer support is available 7 days per week.