The 9602-LP is a pocket-size, low-cost, satellite tracker designed to operate with the Iridium low-Earth orbit satellite network. It is a self-contained unit relying on an internal micro-controller/GPS receiver for operation. The 9602-LP measures 2.7” x 2.2” x 0.9”, weighs less than 5 ounces and can be attached to high value, un-tethered or non-powered assets such as shipping containers, barges, railcars, trailers, buoys or even to a person. It is also being used by the militaries to track environmentally demanding platforms including helicopters, fixed wing aircraft, unmanned aerial vehicles, rockets, high altitude balloons, ships, speed-boats, ground vehicles and hand-emplaced and air-deployed remote sensors.

The 9602-LP is designed with ultra-low power consumption electronics. At stand-by mode, the unit draws less than 65μA in the range of 3.5VDC to 5.5VDC input. Therefore, with a 2A-Hr Li-battery (the size of an AA Alkaline battery), it is capable of delivering uninterrupted service of up to two years with two reports per day. Battery life can be further extended by using a built-in motion sensor to reduce reporting frequency when a platform is not in motion.

The 9602-LP can send either a standard or a 256-bit AES encrypted GPS report at a pre-programmed interval ranging from once every four seconds to once every seven days. The interval can be changed remotely while the unit is in the field. There is an available serial port that can be used to communicate with an external sensor or data terminal equipment (DTE) such as a PDA. There are also seven discrete I/Os for external sensor interfaces as well.

The 9602-LP has a guarded Emergency switch to alert the recipient of an emergency situation as well as to indicate proper operation of the tracker. It has five LEDs providing the status of power input, GPS fix, Iridium connection, SBD transmission and emergency alert.
IRIDIUM™ SATELLITE TRACKER: MODEL 9602-LP

Pocket-size, self-contained satellite tracker
Ultra-low power consumption
AES 256-bit encryption both transmit/receive
Two-way communications
Real-time reporting
Truly global coverage

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## Model 9602-LP Specifications

### Mechanical
- **Dimensions:** 2.73" L x 2.17" W x 0.94" D
- **Weight:** 4.8 oz.
- **I/O Interface:** 15-Pin D-Sub
- **Antennas Interface:** SMA female connectors
- **Cooling:** Convection
- **Enclosure:** Aluminum (hard-plastic is available for light-weight version)

### Electrical
- **Input Voltage Range:** 3.6VDC to 5.5VDC or 6.5VDC to 32VDC
- **Input Nominal Voltage:** 5.0VDC
- **Power consumption during standby:** Less than 65μA @ 5.0VDC
- **Power Input Type:** External DC power

### Iridium RF Board
- **Operating Frequency:** 1616 to 1626.5 MHz
- **Link Margin Downlink:** 13 dB average
- **Link Margin Uplink:** 7 dB average
- **Average Power Transmission:** < 1.0 W

### GPS Receiver
- **Receiver Type:** NEO-6Q, 1575.42 MHz (L1), 16-channel, C/A code
- **Accuracy:** 2.5 m CEP
- **Update Rate:** 5 Hz
- **Start-up Times:** 1 second hot-starts, 28 seconds warm- and cold-starts
- **Sensitivity:** -160 dBm

### Environmental
- **Operating Temperature:** -40°F to +185°F
- **Operating Humidity:** < 75% RH

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