# GPS/GSM 20-70 45g Transmitter

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### **SENSORS**

The GPS/GSM 20-70 45g Transmitter includes sensors to measure temperature, battery voltage, and activity. A multi-channel GPS receiver calculates position, altitude, course, speed, HDOP, VDOP, and number of GPS satellites.

# **GENERAL ELECTRICAL SPECIFICATIONS**

Dual Band Frequencies: 850/1900 MHz or 900/1800 MHz Power output: 2 W Output impedance: 50 ohms Quiescent current:  $<3 \mu A$ Supply voltage: 3.6-4 volts Operating temperature range:  $-15-45^{\circ}C$ Certified by:

FCC Industry Canada PTCRB

#### \* Harnessing loops and neoprene pad not included in these dimensions.

\*\* Neoprene pad not included.

\*\*\* Matte finish does not apply to the polycarbonate window covering the solar array.

# PHYSICAL SPECIFICATIONS

**Dimensions\*:** Length 3.30 in (8.38 cm) x Width 1.15 in (2.92 cm) x Height 0.80 in (2.03 cm) **Weight\*\*:** ~45 grams

**Antenna:** Hard nylon-coated flexible stranded marine-grade stainless steel, 3.35 in (8.51 cm) long, protruding from the back edge of the transmitter 45° to the bottom face

## **FEATURES**

- Solar-powered, rechargeable battery
- Microprocessor-controlled power management
- Internal multi-channel micro-power GPS receiver
- SBAS capable (WAAS, EGNOS, and QZSS)
- GPS horizontal accuracy ±18 m
- GPS vertical accuracy ±22 m
- GPS resolution 0.00001 degree (~1 meter at the equator)
- Dynamically adjusting GPS fix rate (1-minute minimum with current software version)
- Archive capacity of up to 258,000 locations
- Configured for backpack attachment (with standard neoprene cushioning pad)
- Alternative color and matte\*\*\* finish options available
- Operating lifetime up to 3 years

# **CONSTRUCTION**

The housing is constructed from a lightweight glass-reinforced epoxy composite material with a contiguous interior metal-plated coating. The unit is hermetically sealed with a metal-to-metal solder joint providing stability during changes in temperature and humidity. The solar array is encapsulated in silicone and covered with a polycarbonate window for added durability.

