

# GPS Down/Up Converter



The GPSfiberLink joins existing raven solutions for remote GPS antenna installations, including the patented, Raven GPS L1 Down/UP converter for coaxial cable lengths up to 1500 feet and GPS L1/L2 in-line amplifiers for length up to a few hundred feet.

The GPS Fiber Link is designed to pass all the GPS frequencies over fiber from a few feet up to more than 2500 feet.

The GPS The GPSfiberLink will cover a frequency range of 700MHz to 1800 MHz, which includes all the future GPS signal frequencies.

Fiber optic cable will not conduct current induced by lightning, which is the ultimate in lightning protection.

The unit is designed to operate on 12VDC or 24VAC, allowing the use of low voltage NEC electrical wiring standards to be used at installation.

**RAVEN**

 **PRECISION**  
*Solutions*

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## DOWNCONVERTER SPECIFICATIONS



### APPLICATIONS

- Low emissions.
- Replaces long cable runs & high gain antennas.
- Easy installation, since cable length is not critical.
- Decreased susceptibility to lightning strike damage.

### SPECIFICATIONS

- Frequency: GPS L1
- Gain Combined: 35 (min)
- Axial Rate: 3 dB (max)
- Noise Figure: 2.5 dB (max)
- Termination: 50  $\Omega$

### SIZE & WEIGHT

- Height: 89 mm (3.5")
- Diameter: 114 mm (4.5")
- Weight: < 0.6 kg (1.3 lbs)

### ENVIRONMENTAL

- Relative Humidity: 0-100% condensing
- Storage Temperature: -55°C to +85°C
- Operating Temperature: -40°C to +65°C
- Altitude: 6,096 m (20,000 ft)

### OTHER

- Connection: TNC, Female
- Packaging: Waterproof enclosure
- Mounting: Standard marine mount, 1" - 14 or 3/4" NPT

## UPCONVERTER SPECIFICATIONS



### SIZE AND WEIGHT

- Dimensions: 44 x 130 x 170 mm (1.75 x 5.12 x 6.68 in)
- Weight: 0.6 kg (20 oz)

### POWER

- Power Requirements: 9-12 VDC via antenna bias or 12  $\pm$ 10% VDC external
- Power Consumption: < 250 mA @ 12 VDC (Both Units)

### ENVIRONMENTAL

- Relative Humidity: 0-95% non-condensing
- Storage Temperature: -50°C to +85°C
- Operating Temperature: 0°C to +50°C
- Altitude: 6,096 m (20,000 ft)

### OTHER

- Connection: BNC connector to downconverter, TNC to GPS receiver.
- Indications: Power  
Fault for Downconverter  
Cable open or short

### ANTENNA CABLE LENGTHS (MAX.)

- Copper DUC 450 m (1,500 ft)\*
- Fiber optic DUC 8 km (5 mi)
- Uses Simplex Multi-Mode Cable Connector type ST

\*RG-58 cable

US patent 5,999,795



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