

# GPS Antenna RF Down-Up Converter Kit

## MODEL 1201-KIT-RF1-DUC

GPS Antenna and  
Down-Converter



RF Up-Converter

For GPS antenna system coax cable installations up to 1,500 ft (450 m), Spectracom offers the Raven StarLink Coax Down/Up Converter Kit. The received GPS frequency is down converted in the outdoor GPS antenna which has a 3/4" NPT threaded ended (male) for mounting. The frequency conversion allows the use RG-58 coax cable (supplied by customer). The system primarily uses TNC-style connectors for all the components in the system. A surge suppressor for the down-converted frequency is included with TNC female connectors. In places where the connection is not TNC, Spectracom provides the appropriate adapters; TNC to BNC to connect to the up converter and TNC to N to connect to the device.

### Specifications

Antenna Down-Converter	
Size	12.93 cm (L) x 12.65 cm (W) x 10.41 cm (H) (5.09" x 4.98" x 4.10") See Raven Industries drawing for more details
Weight	1.0 lb (0.45 kg)
Cable Type	RG-58, 50Ω (1500 ft maximum cable length, 450 m)
LO Frequency	16.368 MHz @ 1 Vp-p
IF Frequency	4.092 MHz @ 1 Vp-p
Antenna Frequency (L1)	1575.42 ± 2 MHz
Input Code	L1 C/A Code
I/O Connector	Female TNC
Operating Temperature	-40° C to + 65° C
Storage Temperature	-50° C to + 85° C
Humidity	100%, condensing

Up-Converter Unit	
Size	22.12 cm (L) x 13.0 cm (W) x 4.57 cm (H) (8.71" x 5.12" x 1.8") See Raven Industries drawing for more details
Weight	< 1.3 lbs (0.6 kg)
Power	+12 VDC @ 150 mA ± 10%
Input LO Frequency	16.368 MHz @ 1 Vp-p received from the Down-Converter
Input IF Frequency	4.092 MHz @ 1 Vp-p received from the Down-Converter
Output Frequency (L1)	1575.42 MHz
Output Code	L1 C/A Code
Operating Temperature	0° C to + 50° C
Storage Temperature	-50° C to + 85° C
Humidity	0 to 100%, non-condensing
Connection to Antenna	Female BNC
Connection to Receiver	Female TNC (100 ft max cable length, 30 m)

External Power Supply	
Input	100-240 VAC, 47-63 Hz
DC Output	+12 VDC/2.1 A