



MODEL **3400-L**

L-Band Beacon
Tracking Receiver

VERSION 1Q01



A Beacon Receiver for Step Track Antennas and Uplink Power Control

The Model 3400-L Version 1Q01 is the latest release of our reliable series of 3400 Beacon Receivers. With Version 1Q01 firmware we now offer the full L-band range of 930 to 2300 MHz, Digital level reference setting, ethernet connectivity with M&C control interface, and power up temperature compensation for rapid signal acquisition. Frequency selection on 1 kHz steps may be accomplished from the front panel or via remote control. Pre-detection noise bandwidth of 50 kHz (or factory option of 25 kHz) facilitates accurate tracking at very low C/N levels.

- Digital level reference setting, -40 to -100 dBm in 0.5 dB steps
- Ethernet connectivity with M&C control interface (serial over ethernet)
- RS-232/422/485 and Ethernet all Standard
- Temperature stabilization compensation

The output of the Beacon Receiver is a DC voltage proportional to the input signal level to be used for both antenna tracking control and automatic uplink power control. A loss-of-carrier indicator is provided in the event the tracking signal is lost. Form "C" relay contacts provide an external loss-of-carrier alarm. A front panel LCD or SSC GUI (via your computer) displays operating frequency, relative signal level, carrier lock or alarm, and input level.

Specifications:

| | |
|----------------------------------|---|
| Input Frequency | 930 - 2300 MHz ⁽²⁾ |
| Input Level | -40 to -100 dBm typical |
| Level Adjust | Digital, 0.5 dB steps |
| Level Accuracy | ±4 dB over entire range |
| Tracking Slope | 0.5 V/dB |
| Tracking Linearity | ±0.25 dB |
| Frequency Selection | 1 kHz steps |
| Min. Input Level for Lock | -110 dBm |
| Input Connector | Type "N" Female, 50 ohm ⁽¹⁾ |
| Threshold | 4 dB C/N for acquisition < 1 dB C/N for carrier lock |
| Tracking Response | 0 to +10 VDC over 20 dB input range standard |
| Alarms | Form-C relay contacts |
| AFC | ±25 kHz ⁽³⁾ |
| Pre-Detection Bandwidth | 50 kHz ⁽³⁾ |
| M&C Connector | DB-9 Female & RJ-45 Connector Ethernet 10/100 Base T |
| MECHANICAL: | |
| Output Connector | Modular Socket & Plug (for ACU and UPC) |
| Dimensions | 1 RU, 19" x 16" x 1.75" |
| POWER: | |
| Prime Input Power | 90-260 VAC, 47-63 Hz, Auto-sensing, 45 Watts max |
| LNB Power | +24 Volts @ 0.3 Amp available on center conductor. Selectable In/Out ⁽⁴⁾ |

For additional options, contact customer service:

- (1) Other Input Connectors (2) Other Ranges Available
(3) Other Bandwidth Options (4) Other Power Options

Contact Us

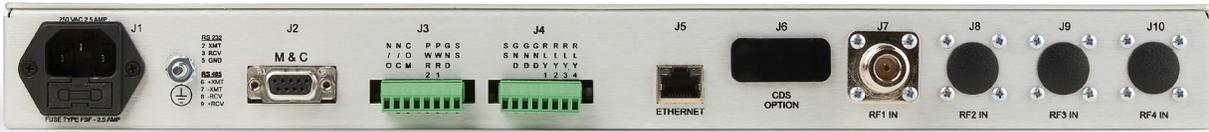
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Features & Options

Enhanced control features and additional monitoring tools are included along with strip charting for signal strength, AFC, and temperature.

Version 2.0 also includes a new event-triggered alarm feature that allows for email notification to your laptop or cell phone. Alarms are triggered via signal strength, loss of signal, and AFC conditions.

Part Numbering: Typical part number 3400-1000N

| | |
|------------------------------|------------------|
| BASE MODEL | 3400 |
| BAND* | 1000 (L-Band) |
| FREQUENCY RANGE* | 930 - 2300 MHz |
| INPUT CONNECTOR | N, B, F, or S |
| AFC / NOISE BANDWIDTH | 50 kHz or 25 kHz |

*Other bands / frequency ranges are available. Please see www.radeuslabs.com for more information.

Valid Options:

BAND SUPPORT:

| | |
|-------------|---------------------------------------|
| 1000 | L-Band : 930 MHz – 2.3 GHz (Standard) |
| 3000 | C-Band : 3.4 – 4.2 GHz |
| 5000 | Kw-Band : 10.7 – 12.75 GHz |

BANDWIDTH:

| | |
|---|---|
| | 50 kHz Pre-detection bandwidth (Standard) |
| + | 25 kHz Pre-detection bandwidth |

INPUT CONNECTOR ON REAR OF BTR:

| | |
|----------|-----------------------------|
| N | 50 ohm N female connector |
| B | 50 ohm BNC female connector |
| F | 75 ohm F female connector |
| S | 50 ohm SMA female connector |



Contact Us

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