



A Tracking Receiver for Antenna Step Tracking and Automatic Uplink Power Control

The Model 3430-CE Version 4 is the latest release of our reliable series of 3430 Beacon Receivers. The Model 3430-CE features an input of **3.4 – 4.2 GHz**, Digital Level reference setting, Ethernet connectivity with M&C control interface, and power up temperature compensation for rapid signal acquisition. Frequency selection on 10 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 on 0.5 dB steps
- Ethernet connectivity with M&C control interface
- **NEW Version 2.0** M&C control interface allows for remote monitoring from one or multiple locations
- 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 facilitate both antenna tracking control and automatic 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 VFD or SSC GUI (via your computer) displays operating frequency, relative signal level, carrier lock or alarm, and input level.

Specifications:

Input Frequency	3.4 - 4.2 GHz
Input Level	-40 to -90 dBm typical
Level Adjust	Digital, 0.5 dB steps
Level Accuracy	±0.4 dB per step ±4 dB over entire range

External BDC or LNB included on Model – CE Beacon Receivers

LNB	WR-229 Flange
BDC	Type "N" Female
Output Connector	Type "F" Female
Tracking Slope	0.5 V/dB
Tracking Linearity	±0.25 dB
Frequency Selection	10 kHz steps
Min. Input Level for Lock	-105 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 ⁽⁴⁾
Alarms	Form-C relay contacts
AFC	±25 kHz ⁽²⁾
Noise Bandwidth	50 kHz
M&C	RS-232 or RS-422/485 Ethernet 10/100 Base T Continuous Data Streaming Option <i>Streaming signal strength output via a dedicated RS-232 DB-9 connector</i>
M&C Connector	DB-9 Female & RJ-45 Connector

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 @ 1 Amp available on center conductor Selectable In/Out ⁽³⁾

For additional options, contact customer service:

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

Contact Us

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MODEL 3430-CE

C-Band Beacon Tracking Receiver

VERSION 4



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 3430-CEY00N

BASE MODEL	3430
BAND	CE
CONVERSION TYPE	Y or Z
FREQUENCY RANGE*	3.4 – 4.2 GHz
AFC & FILTERING	O, A, S, or T
BANDWIDTH	0 or 5
INPUT CONNECTOR	N, B, Q or S

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



Valid Options:

CONVERSION TYPE:

Y	LNB to be Mounted at the Antenna with a WR-229 Flange
Z	BDC with Type "N" Input Connector

AFC & FILTERING:

O	Standard AFC. Standard 0.4 Hz Output Smoothing Filter.
A	No AFC – Use for Tracking Wide Data Carriers. Standard 0.4 Hz Output Smoothing Filter.
S	No AFC and No 0.4 Hz Output Smoothing Filter.
T	Standard AFC. No 0.4 Hz Output Smoothing Filter.

BANDWIDTH:

0	50 kHz Pre-detection Bandwidth
5	25 kHz Pre-detection Bandwidth

INPUT CONNECTOR ON REAR OF BTR:

N	50 ohm N Female Connector
B	50 ohm BNC Female Connector
Q	50 ohm TNC Female Connector
S	50 ohm SMA Female Connector

M&C:

RS-232	
RS-422/485	
Ethernet 10/100 Base T	with SSC Graphical User Interface
Optional	Continuous Data Streaming

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