MODEL **3430-CH**

C-Band Beacon
Tracking Receiver

VERSION 4

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

The Model 3430-CH Version 4 is the latest release of our reliable series of 3430 Beacon Receivers. The Model 3430-CH 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	-30 to -90 dBm typical
Level Adjust	Digital, 0.5 dB steps
Level Accuracy	±0.4 dB per step ±4 dB over entire range
Total Composite Input Level	-15 dBm maximum
Tracking Slope	0.5 V/dB
Tracking Linearity	±0.25 dB
Frequency Selection	10 kHz steps
C-to-L Band Conversion	Internal
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 (2)
Alarms	Form-C relay contacts
AFC	±25 kHz (3)
Noise Bandwidth	50 kHz
M&C	RS-232 or RS-422/485 Ethernet 10/100 Base T Continuous Data Streaming Option *Streaming signal strength output via a dedicated RS-232 DB-9 connector*
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 (4)

For additional options, contact customer service:
(1) Other Input Connectors **(2)** Other Ranges Available
(3) Other AFC Options **(4)** Other Power Options

Contact Us

Radeus Labs, Inc. • (858) 391-1255 • Sales@radeuslabs.com
12720 Danielson Ct. • Poway, CA 92064 USA • www.radeuslabs.com

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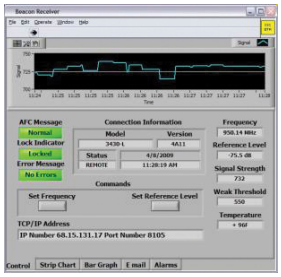
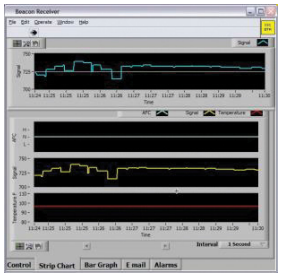
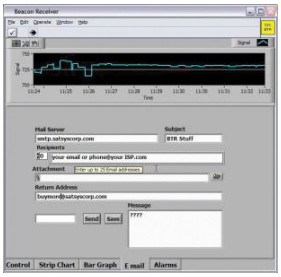
Features & Options

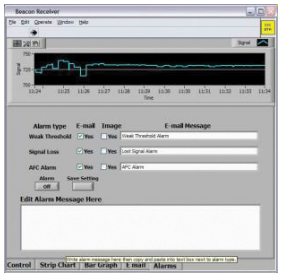
Enhanced control features and additional monitoring tools are included along with strip charting for signal strength, AFC, and temperature.

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 3430-CH000N
BASE MODEL	3430
BAND	CH
CONVERSION TYPE	0
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:	
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	No 0.4 Hz output smoothing filter. Standard AFC.
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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