



*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
- ★ 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*
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
	other ranges optional****
Alarms .....	Form-C relay contacts
AFC .....	±25 kHz**
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
<b>MECHANICAL:</b>	
Output Connector .....	Modular socket & plug
Dimensions .....	1 RU, 19" x 16" x 1.75"
<b>POWER:</b>	
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***

\* Other input connectors available please contact SSC  
 \*\*\* Other power options available please contact SSC

\*\* Other AFC options available please contact SSC  
 \*\*\*\* Other ranges available please contact SSC



**Valid Options**

**AFC and Filtering**

- 0 Standard AFC and 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

**Part Numbering**            Typical part number 3430-CH000N

Base Model	BAND	Conversion Type	Frequency Range	AFC & Filtering	Band-width	Input Connector
3430	CH	0	3.4 – 4.2 GHz	0, A, S, or T	0 or 5	N, B, Q or S

Other Frequency Ranges are available.

Please see <http://www.satsyscorp.com> for more information.

Figure 1. \*User interface example

