Model 3430-KuD
Ku-Band Beacon Tracking Receiver

A tracking receiver for antenna step tracking and automatic uplink power control

The Model 3430-KuD Version 4 is the latest release of our reliable series of 3430 Beacon Receivers. The Model 3430-KuD features an input of **10.7- 11.7 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 .... 10.7 -11.7 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

Input Connector .... Type "N" 50 Ohm Female

Tracking Slope .... 0.5 V/dB

Tracking Linearity .... ±0.25 dB

Frequency Selection .... 10 kHz steps

Ku 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 & 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

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∗∗∗

∗   Other input connectors available please contact SSC   ∗∗   Other AFC options available please contact SSC

∗∗∗   Other power options available please contact SSC   ∗∗∗∗   Other ranges available please contact SSC

Valid Options

AFC and Filtering

O   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.

S   50 ohm SMA female connector.

Reliable products for commercial and government satellite communications since 1980

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-KuD000N

Base Model	BAND	Conversion Type	Frequency Range	AFC & Filtering	Band-width	Input Connector
3430	KuD	0	10.7 -11.7 GHz	0, A, S, or T	0 or 5	N or S

Other Frequency Ranges are available.   Please see http://www.satsyscorp.com for more information.

Satellite Systems announces the new control GUI version **2.0** for our Beacon Receiver Product line. 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.