

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

The Model RL3430 is the same reliable beacon receiver you can depend on with a new Non-coherent, FFT detection method. 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 10 kHz steps may be accomplished from the front panel or via remote control. Software selectable pre-detection noise bandwidth facilitates accurate tracking at very low C/N levels. Accu-track search and acquire AFC feature with several search bandwidths up to ± 800 kHz!

- ★ Non-coherent, FFT detection method
- ★ Larger 2x20 display
- ★ Ethernet connectivity with M&C control interface
- ★ 10 kHz Tuning steps

The output of the Beacon Receiver is a DC voltage proportional to the input signal level to facilitate 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 network-based GUI displays operating frequency, relative signal level, carrier lock or alarm, and input level.

Specifications

Input Frequency	930 - 2300 MHz
Input Level	-40 to -100 dBm typical
Level Adjust	Digital, 0.5 dB steps
Tracking Slope	0.5 V/dB
Tracking Linearity	± 0.25 dB
Frequency Selection	10 kHz steps
Min. input level for Lock	-115 dBm typical
RF Input Connector	Type "N" female, 50 ohm connector
Sensitivity (C/N ₀)	40 dB-Hz
Tracking Response	0 to +10 VDC over 20 dB input range
Alarms	Form-C relay contacts
Pre-detection Bandwidths	15 kHz, 50 kHz, software selectable
Accu-Track searchable bandwidths:	+/- 50kHz, +/-75kHz, +/-100kHz, +/-150kHz, +/-200kHz, +/-250kHz, +/-300kHz, +/-400kHz, +/-500kHz, +/-600kHz, +/-700kHz, +/-800kHz
Remote M&C	RS-232 or RS-422/485 DB-9 Female Ethernet 10/100 RJ-45 Jack



Model RL3430

Digital Tracking Receiver

MECHANICAL:

Output Connector

Modular socket & plug

Dimensions

1 RU, 19" x 16" x 1.75"

POWER:

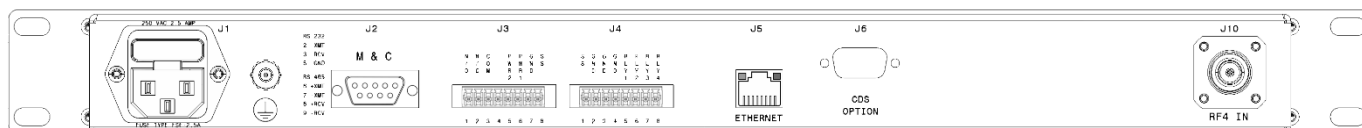
Prime Input Power

90-260 VAC, 47-63 Hz, auto-sensing, 45 Watts max

LNB Power

+24 Volts @ 1 Available on center conductor w current monitoring

Selectable In/Out, other power options available***



AVAILABLE FREQUENCY INPUT BANDS

L BAND	930-2300 MHz
S BAND	2.0-4.0 GHz
C BAND	3.4-4.2 GHz
X BAND	7.25-7.75 GHz
Ku BAND	10.7-12.75 GHz
Ka BAND	18.2-21.2 GHz

*Other frequency plans available, if selecting the extended X or Ka performance option please add XP to model# below.

Part Numbering: *Typical part number examples: 3500-L1N... 3500-Ku4S... 3430-X2N*

Base Model	Bands	Input Connector	Extended Performance Option
3430	L, S, C, X, Ku, Ka	N = N Type, S = SMA, F = F Type	N/A Model 3500 Only