



Model 3430 Beacon Tracking Receivers

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



The Model 3430 is a line of fully frequency agile satellite receivers designed to provide a linear DC reference voltage proportional to the received signal level of a satellite beacon or narrow-band SCPC carrier. Frequency selection on 10 kHz steps may be accomplished from the front panel or remote control. Pre-detection noise bandwidth of 50 kHz facilitates accurate tracking at very low C/N levels.

The output of the Beacon Receiver is a DC voltage proportional to the input signal level to facilitate both 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 external Loss of Carrier Alarm. A front panel VFD displays operating frequency, relative signal level, carrier lock or alarm and input level.

Many Frequency ranges and configurations are available. See model chart on next page.



*Reliable products for commercial and
government satellite communications
since 1980*

Version 3 Firmware Features:

- RS-232 / RS-485 are both included and selected via front panel menu options.
- Available baud rates of 1200, 2400, 4800, 9600 and 19200 are selected via front panel menu options.
- Extended RS-485 addressing range of hexadecimal 01 - FF.
- Remote Port polling active in Local Mode.



Satellite Systems Corporation
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Model and Frequency Range Selection Table

Model	Frequency Range	Conversion	Band	Application
3430-IF	50 - 200 MHz	None	70 and 140 MHz IF	Any 70 MHz or 140 MHz IF application
3430-L *	950 - 1800 MHz	None	Standard L-Band	Standard L-Band
3430-LD *	930 - 1800 MHz	None	Extended L-Band	Extended L-Band
3430-LF *	930 - 2050 MHz	None	Extended L-Band	Extended L-Band
3430-LW *	950 - 2050 MHz	None	Extended L-Band	Extended L-Band
3430-S *	2.5 - 2.7 GHz	External BDC or LNB	Standard S-Band	LNB for antenna Feed mounting
3430-CE *	3.4 - 4.2 GHz	External BDC or LNB	Extended C-Band	LNB for antenna Feed mounting
3430-CH	3.4 - 4.2 GHz	Internal BDC	Extended C-Band	Optimized for High-input signals
3430-I *	4.5 - 4.8 GHz	External BDC or LNB	Standard I-Band	LNB for antenna Feed mounting
3430-X	7.25 - 7.75 GHz	Internal BDC	Standard X-Band	Standard X-Band
3430-KuA *	11.7 - 12.2 GHz	External BDC or LNB	Partial Ku-Band	LNB for antenna Feed mounting
3430-KuB *	12.2 - 12.75 GHz	External BDC or LNB	Partial Ku-Band	LNB for antenna Feed mounting
3430-KuC *	10.95 - 11.7 GHz	External BDC or LNB	Partial Ku-Band	LNB for antenna Feed mounting
3430-KuD	10.7 - 11.7 GHz	Internal BDC	Partial Ku-Band	Partial Ku-Band
3430-KuE	11.7 - 12.75 GHz	Internal BDC	Partial Ku-Band	Partial Ku-Band
3430-KW	10.7 - 12.75 GHz	Internal BDC	Full Global Ku-Band	Full Global Ku-Band

* Optional DC power available – Please contact factory for details.



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General Specifications

See Individual Spec Sheets for more details.

Tracking Slope	0.5V/dB
Tracking Linearity	0.25 dB
Frequency Selection	Local and Remote on 10 kHz steps
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
Alarms	Form-C relay contacts
AFC	±25 kHz
Noise Bandwidth	50 kHz

Remote Monitor and Control

Interface	Both RS-232 and RS-485 are supported Selectable by front panel
Baud Rate	1200, 2400, 4800, 9600, and 19200 Selectable by front panel
RS-485 Addressing	Hexadecimal 01 - FF, except 0A and 0D Selectable by front panel
Data Format	8N1
Local / Remote	Selectable by front panel Unit can be polled remotely even in the Local mode
Connector	DB9-Female

MECHANICAL:

Output Connector	Modular socket & plug
Dimensions	1 RU, 19" x 16" x 1.75"

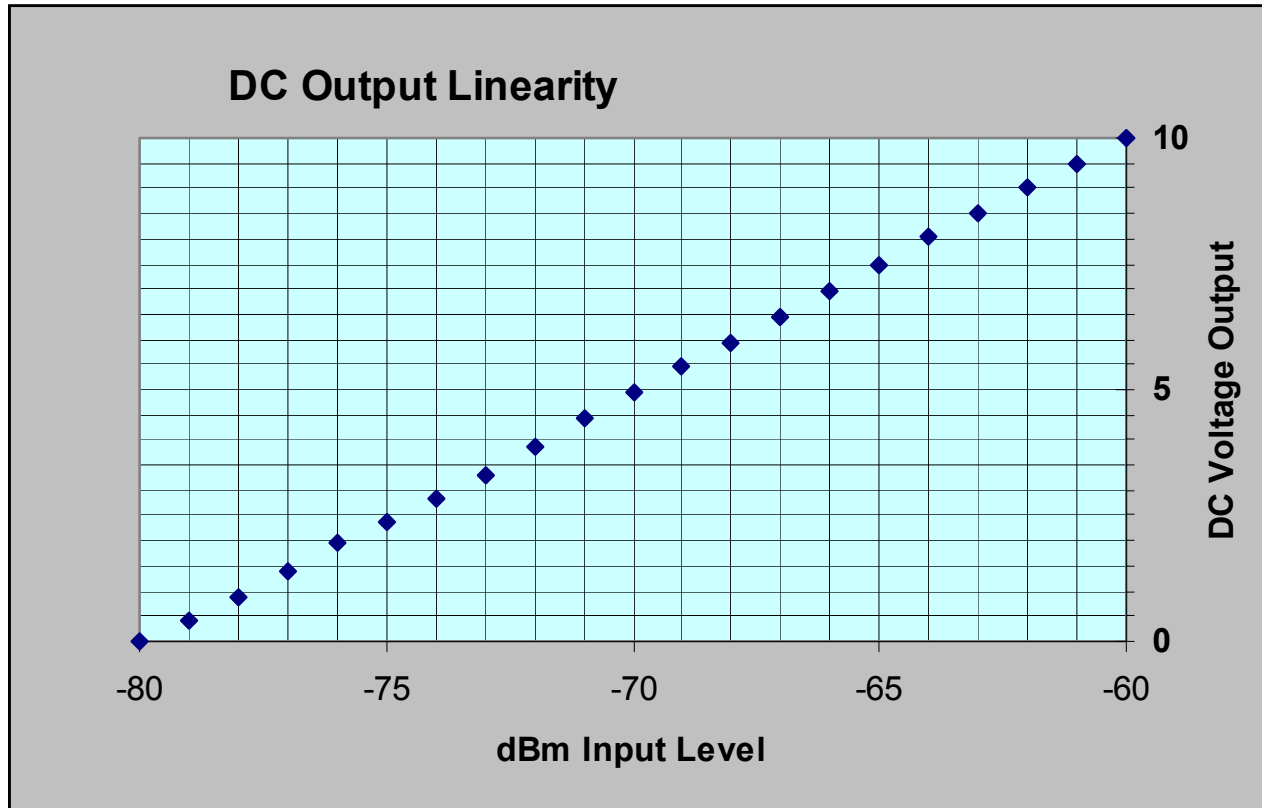
POWER:

Prime Input Power	90-260 VAC, 47-63 Hz, auto-sensing, 45 Watts max
Optional DC Power	Contact factory for availability



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