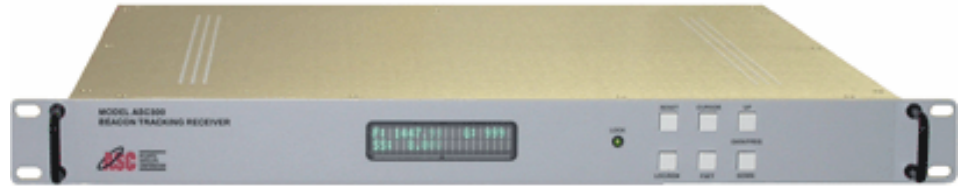


# Model ASC 300-X (Internal BDC) Beacon Tracking Receiver

Quality Products @ Reasonable Prices



## Functional Description

The Model **ASC300 X Beacon Tracking Receiver** is a high performance self contained unit that is designed to real time track the power density of a satellite beacon and output a DC voltage that is linearly proportional to the beacon power by utilizing a true, RMS-responding power detector. The **ASC300 X will tune over any X band satellite (7.25 - 7.75 GHz) by utilizing an internal block down converter. The applications for the ASC300 X** are for antenna tracking controllers and uplink power control system.

## Systems Specifications

Input Frequency.....(7.25 to 7.75 GHz)  
Internal Block Converter  
Pre-detection Bandwidth.....25 kHz  
Input Level.....-80 dBm, min.; -50 dBm max.  
For full tracking range capability  
Frequency Tuning.....10 kHz Steps  
Frequency Adjust.....Front Panel or Remotely  
AFC.....± 12.5 kHz  
Threshold.....<45 dB-Hz (C/N<sub>0</sub>) for acquisition  
Input Impedance.....50 Ohm  
Input Connector.....Type-N, Female  
(SMA Optional)  
Output Impedance.....100 Ohm, single ended  
Output Connector....Terminal plug and BNC Female  
Tracking Gradient.....0.5 V/dB, Std  
Tracking Response.....0 to +10 VDC for a  
20 dB input level change  
System Level Adjust.....30 dB, Linear  
Frequency Stability.....<1 ppm, 0<sup>0</sup>c to +50<sup>0</sup> c

System Level Adjust.....30 dB, Linear  
Frequency Stability.....<1 ppm, 0<sup>0</sup>c to +50<sup>0</sup> c  
Frequency Reference.....10 MHz (Internal)  
Phase Noise.....>75 dB-Hz, 1 kHz from Carrier  
Alarms.....Unit Lock  
Alarm Relay.....Form-C  
External LNB Power.....None  
Continuous Digital Streaming (CDS).....DB-9, RS-232  
(optional) See Below \*  
Front Panel Display.....Vacuum Fluorescent  
M&C...RS-232 or RS-422/485 Switchable on rear panel  
Ethernet 10/100 Base T (**Optional**)  
M&C Connector.....DB-9, Female  
RJ-45 Connector

## Physical Characteristics

Size.....1.75"H X 16.00"D X 19.00"W  
Weight.....12 lb. (5.44 kg)  
Primary Power.....90 - 264 VAC 47 - 63Hz, 1.4 A  
Auto-Sensing

## Environmental Specifications:

Operating Temperature.....0<sup>0</sup>c to +50<sup>0</sup> c  
Storage Temperature.....-40<sup>0</sup>c to +70<sup>0</sup> c  
Humidity.....95% RH@ 40<sup>0</sup> c

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## **\* CDS Continuous Digital Streaming**

The streaming option associated with the ASC300 series of beacon tracking receivers provides a continuous, two byte, data stream running at 2400 baud that contains twelve bits of signal strength level indication as well as lock or alarm condition of the unit. Other baud rates are available. A female DB9, RS-232, interface connector on the rear of the unit is specifically dedicated for this option.

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