

## Model ASC 300-L (950 MHz to 2300 MHz) Beacon Tracking Receiver

*Quality Products @ Reasonable Prices*



### Functional Description

The Model ASC300-L Beacon Tracking Receiver is a high performance 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 applications for the ASC300-L are for antenna step track controlling and uplink power control system.

### Systems Specifications

Input Frequency.....950 MHz to 2300 MHz  
 Pre-detection Bandwidth ..... 40 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 ..... ±20kHz  
 Threshold ..... <45 dB-Hz (C/N<sub>0</sub>) for acquisition  
 Input Impedance.....75 Ohm  
 Input Connector . Type-F, Female for 950 to 2050 MHz  
 Type-N Female or SMA Female for 2200 to 2300 MHz  
 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°c to +50°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.....+18 VDC, switchable In-Out, .500  
 ..... ma, max.+15 and +24 VDC Optional  
 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 Jack connector

### Physical Characteristics

Size..... 1.75"H X 16.00"D X 19.00"W  
 Weight..... 8 lb. (3.63 kg)  
 Primary Power ..... 90 - 264 VAC 47 - 63Hz, 1.4 A  
 ..... AutoSensing

### Environmental Specifications:

Operating Temperature..... 0°c to +50°c  
 Storage Temperature..... -40°c to +70°c  
 Humidity..... 95% RH@ 40°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 9600 baud that contains ten 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. RS-422 is Optional