

## Model ASC 300-LW (930 MHz to 2300 MHz) Beacon Receiver

*Quality Products @ Reasonable Prices*



**Functional Description:**

The Model **ASC300LW Beacon 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 proprietary “**SWEEP TRAC**” option provide signal tracking capability for higher drift LNB’s. The applications for the ASC300-LW are for antenna step track controlling and uplink power control system.

**Systems Specifications:**

Input Frequency.....930 MHz to 2300 MHz  
 Pre-detection Bandwidth..... 60 kHz  
 Input Level .....-90 dBm, min.; -30 dBm max.  
 .....For full tracking range capability  
 Frequency Tuning..... 10 kHz Steps  
 Frequency Adjust..... Front Panel or Remotely  
 C/N<sub>0</sub>..... ≤45 dB-Hz for capture  
 AFC (Note 1)..... ± 30 kHz  
 Image Rejection.....>40 dB, 950 to 2300MHz  
 Input Impedance (Note 2)..... 75 Ohm  
 Input Connector (Note 2)..... Type-F, Female  
 Output Impedance ..... 100 Ohm, single ended  
 Output Connector ..... Terminal plug and BNC Female  
 Tracking Gradient .....0.5 V/dB  
 Tracking Response..... 0 to +10 VDC  
 ..... for a 20 dB input level change  
 System Level Range..... 60 dB  
 System Level Adjust ..... 0 to 60dB, 0.5dB Steps  
 Frequency Stability ..... <1 ppm, 0<sup>o</sup>c to +50<sup>o</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 ..... +18 VDC, Switched, In/Out, 500 ma, max  
 CDS (Optional) ..... RS-232 or RS-422, DB-9 Female Connector  
 Front Panel Display ..... Vacuum Fluorescent  
 M&C ..... RS-232 or RS-422/485 switched on rear  
 M&C Connector ..... DB-9, Female on rear  
 Ethernet 10/100 Mbps Fast Ethernet ..... (Optional)  
 Ethernet connector ..... RJ-45 on rear

**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<sup>o</sup>c to +50<sup>o</sup> c  
 Storage Temperature ..... 40<sup>o</sup>c to +70<sup>o</sup> c  
 Humidity .....95% RH@ 40<sup>o</sup> c

**Notes:**

**Note 1:** Up to ± 100kHz with Proprietary “sweep trac” automatic frequency capture. Customer specified tracking range. Less than 6 sec. Capture time at ± 100kHz tracking.

**Note 2:** 50 Ohm N or SMA Type, available. Call or Email Factory

**Ethernet Option:** Not installed on STD units. Must be installed at factory.

Software support: Windows 98/2000/XP/2003/Vista/7 32bit & 64bit  
 Protocol: TCP/IP, UDP, HTTP, SNMP, ARP, Telnet, ICMP, BOOTP, DHCP, SMTP



**CDS, Continuous Digital Streaming Option:**

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 or RS-422, interface connector on the rear of the unit is specifically dedicated for this option.