

## Model ASC 300Ku E (External BDC) Beacon Tracking Receiver

*Quality Products @ Reasonable Prices*

**Model ASC300Ku1-E (10.7 to 11.70 GHz)  
Model ASC300Ku2-E (11.70 to 12.75 GHz)**



### Functional Description:

The Model ASC300Ku-E Series Beacon Receivers are high performance units that are 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 Ku-E will tune over any of the three primary Ku band satellites (10.7-11.70 GHz, 11.70-12.20 GHz, 12.25-12.75 GHz) by utilizing an external block down converter. The frequency band must be customer specified. The applications for the models ASC300Ku1-E and ASC300Ku2-E are for antenna tracking controllers and uplink power control system.

### Systems Specifications:

Input Frequency ..... Customer Specified  
 ..... External Block Converter  
 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  
 AFC .....  $\pm 30$  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 ..... 0 to 60 dB, 0.5 dB Steps  
 Frequency Stability .....  $<1$  ppm, 0<sup>o</sup>c to +50<sup>o</sup>c  
 Frequency Reference ..... 10 MHz (Internal)

Phase Noise .....  $>75$  dBc-Hz, 1 kHz from Carrier  
 Alarms ..... Unit Lock  
 Alarm Relay ..... Form-C  
 External LNB Power ..... +24 VDC, switchable In-Out  
 ..... 500 ma Max.  
 CDS (**Optional**) ..... RS-232 or RS-422  
 CDS Connector ..... DB9 Female on rear  
 Front Panel Display ..... Vacuum Fluorescent  
 M&C ..... RS-232 or RS-422/485 Switchable  
 M&C Connector ..... DB-9, Female on rear  
 Ethernet 10/100 Base T ..... (**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  
 ..... Auto-Sensing

### 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

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**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. A female DB9, interface connector on the rear of the unit is specifically dedicated for this option.