

# Model ASC 300KuET-Tri-band Extended Beacon Receiver

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### Functional Description:

The Model ASC300KuET-Triband Extended Beacon 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 ASC300KuET will tune over the three primary Ku band satellites (10.7-11.70 GHz, 11.70-12.20 GHz, 12.25-12.75 GHz) by utilizing internal block down converters. The applications for the ASC300 Ku-T are for antenna tracking controllers and uplink power control system.

### Systems Specifications:

Input Frequency ..... 10.7 to 12.75 Ghz  
 ..... Internal 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 ..... 60 dB  
 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, LNB Power  
 Alarm Relay ..... Form-C  
 External LNB Power ..... None  
 CDS ..... RS-232 or RS-422 (**Optional**)  
 CDS interface connector ..... DB-9  
 Front Panel Display ..... Vacuum Fluorescent  
 M&C ..... RS-232 or RS-422/485 Switchable on rear panel  
 M&C Connector ..... DB-9, Female  
 Ethernet 10/100 Base T ..... (**Optional**)  
 Ethernet ..... RJ-45 Connector

### Physical Characteristics:

Size ..... 1.75"H X 16.00"D X 19.00"W  
 Weight ..... 14 lb. (6.35 kg)  
 Primary Power ..... 90 - 264 VAC 47 - 63Hz, 1.4 A  
 ..... Auto-Sensing

### 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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**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 receivers provides a continuous, two byte, data stream running at 9600 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, interface connector on the rear of the unit is specifically dedicated for this option.