

Model ASC 300Ku I(Internal BDC) Beacon Tracking Receiver

Quality Products @ Reasonable Prices



Functional Description

The Model **ASC300Ku I 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 **ASC300Ku I will tune over any of the three primary Ku band satellites (10.95-11.70 GHz, 11.70-12.20 GHz, 12.25-12.75 GHz) by utilizing an internal block down converter. The frequency band must be customer specified. The applications for the ASC300 Ku I are for antenna tracking controllers and uplink power control system.**

Systems Specifications

Input Frequency.....Customer Specified
 Internal Block Converter (See below bands)
 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..... ± 20 kHz
 Threshold.....<45 dB-Hz (C/N₀) 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 Adjust30 dB, Linear
 Frequency Stability<1 ppm, 0^oc to +50^o c

System Level Adjust..... 30 dB, Linear
 Frequency Stability <1 ppm, 0^oc to +50^o c
 Frequency Reference10 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..... RS-232 or RS-422
 DB9 interface connector.....(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 9 lb. (4.09 kg)
 Primary Power90 - 264 VAC 47 - 63Hz, 1.4 A
 Auto-Sensing

Environmental Specifications:

Operating Temperature 0^oc to +50^o c
 Storage Temperature -40^oc to +70^o c
 Humidity95% RH@ 40^o c

- Band 1 (Europe-10.95 to 11.70 GHz)
- Band 2 (N. America-11.70 to 12.2 GHz)
- Band 3 (Aussat-12.25 to 12.75 GHz)

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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 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.