

Model ASC 300Ku I(Internal BDC) Beacon Receiver

Quality Products @ Reasonable Prices



Functional Description

The Model **ASC300Ku I 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 **ASC300Ku I will tune over any of the three primary Ku band satellites (10.7-11.70 GHz, 11.70-12.75 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..... 50 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..... ±23 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 Adjust..... 0 to 60dB, 0.5dB Steps
 Frequency Stability..... <1 ppm, 0^oc to +50^o 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 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
 Ethernet..... RJ-45 Connector

Physical Characteristics

Size 1.75"H X 16.00"D X 19.00"W
 Weight 9 lb. (4.09 kg)
 Primary Power 90 - 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
 Humidity 95% RH@ 40^o c

Band 1 (10.7 to 11.70 GHz)

Band 2 (11.70 to 12.75 GHz)

* CDS Continuous Digital Streaming

The streaming option associated with the ASC300 series of beacon 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.