



IOCSIM PCM SIMULATOR MODULE



FEATURES

- Output codes - NRZ-L, M, S; Bi-Ø-L, M, S; RNRZ
- Bit rate –100 bps to 35 Mbps
- Bits / Word – 8 to 16
- Words / Frame – 4 to 1023
- Frame sync pattern up to 16 bits
- Fill pattern – Fixed (user specified), Zero, Random
- Subframe sync – User defined location, length, orientation
- Two unique words – Subcomm, Supercomm
- External inputs via data acquisition modules - analog, GPS, RS232
- IRIG-106 format compliant

OVERVIEW

The IOCSIM module is part of the Telemetry Testers family of products that plug into the AL2873 chassis. The module creates a user defined output based on the IRIG106 PCM telemetry standard. The module generates a synchronous data and clock output that is suitable for insertion into any standard TTL DECOM (RS-422 outputs available) or as a modulation source for end to end testing in ground station environment.

This module is capable of producing data rates up to 35Mbps, generating user defined fill patterns or, can be coupled with the standard data acquisition modules to provide analog, serial or asynchronous signal directly into a simulated PCM stream. Module outputs are TTL Data and 0° clock capable of driving long lengths of coaxial cabling.

SPECIFICATIONS

GENERAL

- Single slot module (3" x 6" x 0.9")
- One module per chassis

INPUTS (via data acquisition modules)

- Analog
- GPS
- RS-232

OUTPUT

- TTL Data and 0° Clock / BNC connectors
- 51Ω / 75Ω driver
- Codes: NRZ-L,M,S; BiØ-L,M,S; RNRZ-15

ENVIRONMENTAL

- Operating temperature: 0° to 50° C
- Relative humidity: 15% to 95%; non-condensing
- Altitude: Sea level to 10,000 feet

POWER

- +5V input from AL2873 chassis backplane

MEAN TIME BETWEEN FAILURES

- ~ 100,000 hours