

## PCMCIA Card - 20 Mbps PCM Bit Sync/Decom



### Applications

- Portable preflight test
- Data analysis
- Data archival
- Flight test instrumentation

### Features

- PCMCIA-based bit synchronization/data decommutator
- Bit sync:
  - Bit rates up to 20 Mbps, NRZ codes
  - Input signal amplitudes from 0.1 to 5.0 Volts p-p
  - Accepts all IRIG 106 PCM inputs
  - Provides all IRIG 106 PCM data outputs with coherent clock
  - On-board bit error rate detector and test data simulator
  - Includes clock sync Indication
- Decom:
  - PCM input rate up to 20 Mbps
  - Accepts RS-422, or TTL input data and clock
  - Onboard minor frame timestamp
- Playback mode
  - Regenerates archived PCM at rates up to 20 Mbps
  - RS-422 and TTL outputs
- Low power 3.3 VDC operation
- Microsoft Windows compatible driver software included
- Supported by third party data analysis software

### Description

The DBS-120S combines the functions of bit synchronization and data decommutation into a single low cost PCMCIA type II card. The card can be installed in a portable PC compatible platform for preflight or lab test. The bit synchronizer provides full featured clock reconstruction, data recovery and code conversion. The bit sync accepts PCM inputs at rates of up to 20 Mbps for NRZ codes and up to 10 Mbps for BiØ codes with amplitudes from 0.1 to 5.0 Volts p-p. The bit sync input impedance is programmable to 50 ohms, 75 ohms or 10k ohms. TTL and RS-422 compatible PCM data and 0°/180° clock bit sync outputs are provided. The bit sync output is also internally connected to the on-card decom. A Bit Error Rate (BER) measurement capability with an on-card test data simulator is included to allow characterization of data link quality. The data decommutator provides full IRIG frame synchronization and data decommutation. The decom accepts PCM data at rates up to 20 Mbps from the on-card bit sync or an external source. The decom external data and clock input is programmable for RS-422, 10 Kohms TTL, or 75 ohms TTL. Decommutated data word, and frame timestamp are made available via the PCMCIA bus for analysis, archival, and monitoring. The card also features a playback mode. In this mode the card regenerates archived PCM data at programmable rates up to 20 Mbps.

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### DBS-120S Datasheet

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