2500-DDB06

RS-422/423A DIGITAL DISTRIBUTION BUFFER

FEATURES

- Single twinaxial input
- Switch selectable for balanced/unbalanced operation
- Selectable input termination (50Ω, 75Ω, 124Ω, & 600Ω)
- Outputs:
  - Three RS-422A balanced with 100Ω impedance
  - Three RS-423A unbalanced with 75Ω impedance
- Front panel LED indicators for output logic state, selected input impedance, and selected input configuration
- Front panel test probe jacks for monitoring power supply and output signal
- Short circuit protection
- 70 dB minimum reverse isolation

OVERVIEW

In combination with the Apogee Labs Model AL2500 chassis, the 2500-DDB06 is a high performance module for simultaneous distribution of RS-422A and RS-423A signals. The 2500-DDB06 accepts a single twinaxial input and can be configured for balanced or unbalanced operation. Input termination has selectable values of 50Ω, 75Ω, 124Ω, 600Ω, and unterminated.

The 2500-DDB06 has six outputs. Three of the outputs are balanced RS-422A with the remaining three being unbalanced RS-423A. The balanced outputs are provided at rear-panel twinaxial connectors. The unbalanced outputs are provided at rear panel BNC connectors.

The digital receiver in the module has internal hysteresis circuitry to improve noise margin and improve output stability. Each of the balanced and unbalanced outputs provide short circuit protection circuitry. The unbalanced outputs have 75Ω output impedances, and the balanced have 100Ω output impedances.

The 2500-DDB06 has seven front panel LED indicators and three front panel test jacks. Seven green LED's are provided to indicate the output logic state, selected input impedance, and selected input configuration. Three test jacks provide connection to the module ground, output of the module power supply, and line driver of selected output. The line driver test jack provides an isolated digital output to monitor the output logic state without disturbing the signal distribution function of the module.

SPECIFICATIONS

INPUT

- One (1) RS-422 input
- Twinax type connectors
- Selectable for balanced or unbalanced operation
- Selectable input termination (50Ω, 75Ω, 124Ω, 600Ω)

OUTPUT

- Six (6) RS-422 outputs: three (3) unbalanced and three (3) balanced
- Twinax (balanced) and BNC (unbalanced) type connectors

INDICATORS

- Output logic state indicator
- Selected input impedance
- Selected configuration

ENVIRONMENT

- Operating temperature: 0° C to +55° C
- Storage temperature: -40° C to +70° C
- Humidity: up to 95% non-condensing

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