



2024 Pack2 Packetizer Module



FEATURES

- Multiplexes source packets from application modules
- Generates CCSDS compatible composite transfer frames
- Supports rates from 200 Kbps to 19.44
- Supports 1ms or 10ms sample intervals
- Transmits user entered notes
- Reports link status
- Supports DS1/DS3 and OC3 link interface modules

OVERVIEW

The PACK2 module collects data from the multiplexing application input modules and formats this data into a composite output stream. This output is serial data with clock and 8-bit parallel data with strobe. The composite output rate for the PACK2 is set by the user during a mission to permit ease of use with synchronous transmission mediums. This fixed rate is programmed into the on-board clock synthesizer.

The PACK2 can be slaved to an external (ST) clock rate when required by specific communication circuits such as DS1/DS3 and OC3 link modules. The parallel and serial interfaces are both available for use by these circuits.

The PACK2 module establishes a user selectable 1 or 10 millisecond data sample interval, collects data from each multiplex application input-module in the unit, and formats the data into CCSDS compatible Transfer Frames for output.

The 2024 is used in conjunction with the Apogee Labs' 2025 Depack2 and 4012 ADPAK1 modules.

SPECIFICATIONS

GENERAL

- Single slot module
- Compatible with AL4300 series Multiplexer/Demultiplexer
- Adjustable clock synthesizer and slave (ST) clock inputs
- CCSDS compatible composite transfer frames
- Remote control capability

INPUT

- External clock: TTL level on SMA type connector; 200 Kbps to 35 Mbps with 0° clock; 200

OUTPUTS

- Serial data and clock: TTL levels; NRZ-L data
- 8 bit parallel output; PECL levels; used in conjunction with Apogee Labs 2026 DS3IF, 2027/2032/2035/2055 OC3IF modules; 25 Kbps to 19.44 Mbps
- Transmits user entered notes

COMPLEMENTARY HARDWARE

- 4012 ADPAK1
- 2025 Depack2