



# APOGEE LABS

## 3102

### Fiber Conversion Module (FCM)



## FEATURES

- Single Slot AL3073 series module
- Encodes three PCM data/clock inputs to three (3) respective fiber outputs.
- Single mode transmitters
- LC fiber optic connectors
- Operational within 10 seconds of power up

## OVERVIEW

The 3102 Fiber Distribution Module (FDM) receives up to three sets of data/clock pairs with a zero degree relationship and then encodes the pairs to a format that is compatible with a single fiber transmitter. These encoded signals are then transmitted out three independent fiber ports.

All three fiber transmitter ports are Single mode transmitters with LC connectors.

When being received by a compatible card (such as the model 3201), the data and clock are recreated with a delay of one data period + 60-70 nS.

The 3102 also drives three status signal LEDs on the front panel of the AL3073 chassis. Each LED corresponds to a data/clock input pair. Each LED status shows whether data and clock are present. If data and clock are present, the signal will be output on its respective fiber transmit port.

## SPECIFICATIONS

### General

- Single Slot AL3073 series module
- Three (3) PCM data/clock inputs
- Three (3) fiber optic outputs

### INPUT

- Serial TTL data and clock
- Input rates from 100bps to 32 Mbps
- DIN std receptacle [1.0/2.3]
- 75Ω input termination to ground
- Zero degree data/clock relationship

### OUTPUT

- Three (3) fiber optic outputs
- Single mode fiber drivers
- LC fiber optic connectors

### STATUS

- AL3073 chassis front panel LEDs
  - Data/clock present

### ENVIRONMENTAL SPECIFICATIONS

- Non-Operating:
  - Temperature: 10° – 130° F
  - Humidity 5% - 90% non-condensing
- Operating:
  - Temperature: 50° - 100° F
  - Humidity: 15% to 70% non-condensing