



### 701207 DRI Optical Interface Module

This module interfaces unframed serial optical to parallel copper. Fiber optic I/O is at STM-1 (155.520 Mbps) or E4 (139.264 Mbps) rates and parallel copper interface at ECL levels. Fiber optical interface is through LC connectors, which are housed in a single mode, 1310 nm SFP device. Copper interface is made through 25 pin sub-mini D connectors and BNC for CLOCK OUT.

### 701208 DRI Electrical Interface Module

This module interfaces unframed serial to parallel electrically. Serial I/O is at STM-1 (155.520 Mbps), E4 (139.264 Mbps) or E3 (34.368Mbps) rates via 75 Ohm SMB connectors or NRZ at ECL levels through 50 Ohm SMB connectors. Serial interface through 75 Ohm connectors is transformer couple line interface, which meets appropriate telecommunication standards. Parallel interface is made through 25 pin sub-mini D connectors. CLOCK OUT is available through a 50 Ohm SMB connector.

I/O consists of 8 DATA bits plus CLOCK and (3) additional signals; TAPE SYNC, FRAME SYNC and ERROR. Front panel controls and indicators include CLOCK OUT SELECT and RECORD and PLAYBACK status indicators. SERIAL or PARALLEL mode and LED ON/OFF are selected by toggle switches located on the front panel. I/O can be changed to multi mode and other wave lengths, if desired.

Modules are designed for use in the Technisys Universal Modular Chassis (701073-XX).

Parallel data input can be implemented in 2 ways.

- 1) Parallel input data can be synchronized using internal reference clock from the module. Under this scenario, reference clock at 1/8th master clock rate is provided to the system for synchronizing data transmission to the module.
- 2) Clock can be provided by the system. In this scenario, the system must provide either master clock at STM-1 or E4 rates or reference clock at 1/8th serial clock rate. These selections are made with on-board jumpers.

LED indicators are driven by inputs from the system. These signals are buffered to enable LED drive.

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## Module 701207 and 701208 Continued

Control / Indicator	Function	Indicator Color
RECORD ERROR (LED)	Indicates RECORD ERROR flag condition	Amber
RECORD CLOCK (LED)	Indicates RECORD CLOCK present	Amber
RECORD FRAME SYNC (LED)	Indicates RECORD FRAME SYNC	Amber
PLAYBACK ERROR (LED)	Indicates PLAYBACK ERROR flag condition	Amber
PLAYBACK CLOCK (LED)	Indicates PLAYBACK CLOCK present	Amber
PLAYBACK FRAME SYNC (LED)	Indicates PLAYBACK FRAME SYNC	Amber
SERIAL/PARALLEL (toggle switch)	Selects SERIAL or PARALLEL CLOCK	
LEDS ON/OFF (toggle switch)	Disables or enables LED illumination	

### Physical Characteristics

Height: PCB 4.5" (11.4 cm) (3U)

Front panel height: 5.25" (13.3 cm) (3U)

Width: 1.6" (4.1 cm)

Depth: 13.13" (33.35 cm) includes rear panel connectors (.63") & front panel handle (1.00")

Weight: 13.1 oz. (1.8 kg) approximate

### Electrical

External interconnection:

CLOCK OUT: BNC connector (Qty 1)

Parallel DATA, CLOCK and other Recorder interface (ECL):

(2)Sub-mini 25 pin Female

Inputs terminated at: 50 Ohm for ECL 100 Ohms differential)

Outputs can be near end terminated at: 50 Ohm for ECL 100 Ohms differential)

### Backplane interconnect:

10 position (2x5) 2mm grid connector rated at 3 amps per pin

+5 volt: 4 pins

-5 volt: 2 pins

Ground: 4 pins + guide

### Power requirements

+5 volt: TBD Amps max.

-5 volt: TBD Amps max.