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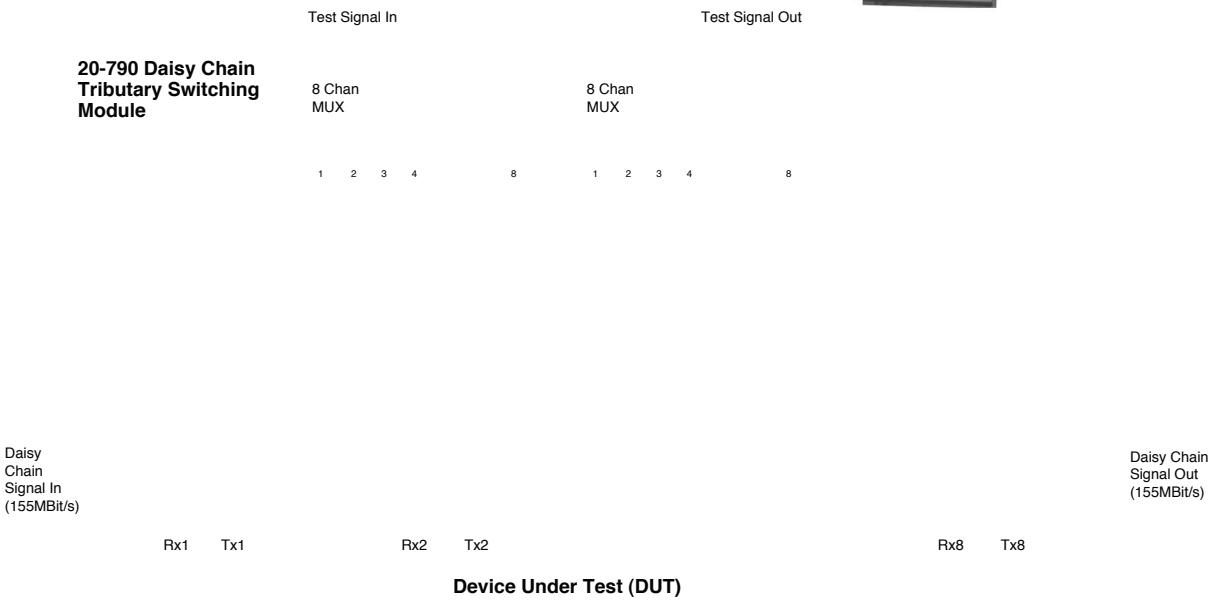
Find the *Pickering 20-791-711* at our website: ***Click HERE***

20-790/791
155MBit/s Daisy-Chain Tributary Switching Module

- Suitable For Testing SONET/SDH Transmission Multiplexers
- Suitable for 2MBit/s up to 155MBit/s
- 8 Tributaries Per Module
- Up To 64 Tributaries Per Mainframe
- Expandable To Any Size: 16, 32, 64, 128, 256...
- 75Ω Impedance With Choice of Connector Types SMZ/BT Type 43 or 1.0/2.3
- All Tributaries Can Be Daisy-Chained to One Signal
- Integrated Multiplexer Allows Selection of One Tributary For Analogue Testing
- 20-791 Version Has Additional Built In Multiplexers For System Expansion
- Built In RS-232 Port

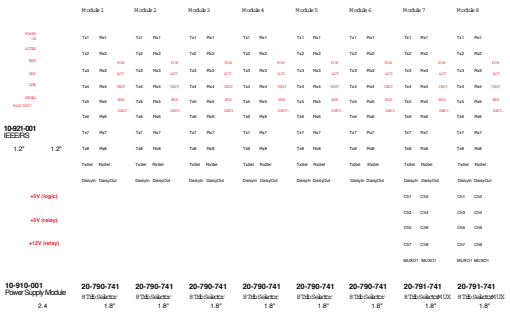


20-791 8-Channel Daisy Chain Switching Module fitted with SMZ/BT Type 43 Connectors.



Block Diagram of 20-790 8-Channel Daisy-Chain Switching Module

The 20-790/791 Daisy Chain Switching Module is designed for telecom test applications. It allows production or verification testing of SONET/SDH transmission multiplexers, suitable for rates up to 155MBit/s. Traffic is sequentially Daisy-Chained through all tributaries (or any selection of tributaries), modules can be cascaded to test any number of tributaries. A built in breakout multiplexer allows separate testing of individual ports. Refer to diagram.



One mainframe has capacity for 64 x 155MBit/s tributaries. (multiple cases can support: 128, 192, 256, etc...)

ISSUE 3, OCT 2006

General Specification (All Versions)

Maximum Voltage:	100V d.c./100V AC
Maximum Power:	10W
Maximum Switch Current:	0.5A
On Path Resistance:	<500mΩ
Off Path Resistance:	>1x10^{8}Ω
Total Switching Time:	10ms
Relay Mechanical Settling Time:	<3ms
Expected Life (Low power):	>1x10^8 operations
Expected Life (Max power):	>2x10^5 operations

RF Specification (Multiplexer)

Characteristic Impedance:	75Ω
Maximum Frequency:	2.5GHz
Rise Time:	<0.4ns
Isolation (at 2GHz):	>50dB

Programming Information

The 20-790 comprises 2 sections-

1. Daisy-Chain switches. These are used to feed signals into and out of the DUT (device under test), any selection of tributaries may be routed (e.g. all even, all odd, etc).

2. Breakout multiplexer. This is used to test a specific tributary.

The 20-792 is programmed as a quad 8 channel multiplexer (see diagram):-

1st multiplexer is used to route the Daisy-Chain switches. The default setting is for all tributaries to be selected.
2nd multiplexer Daisy-Chain Tributary Switch Multiplexer.
3rd multiplexer is used to select the required instrument.
4th multiplexer is used to select the multiplexer to a specific tributary.

Software drivers for LabWindows/CVI, HP VEE and LabView are available.

For further information on operation please refer to the Operating Manual.

Width and Dimensions

All modules conform to the 6U height (128mm) Eurocard standard and are 160mm deep. Panel width for all versions is 1.8 Inches , with up to 8 modules per mainframe.

Operating/Storage Conditions

Operating Conditions

Operating Temperature:	0°C to 55°C
Humidity:	Up to 95% non-condensing
Altitude:	5000m

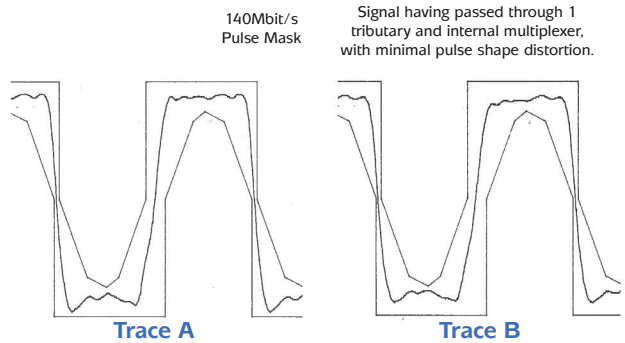
Storage and Transport Conditions

Storage Temperature:	-20°C to +75°C
Humidity:	Up to 95% non-condensing
Altitude:	15000m

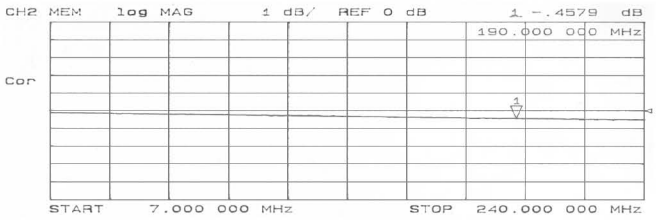
SDH/SONET Tributary Testing is a specialised area, please contact Pickering Interfaces for additional application information and to discuss your exact requirements.

Time Domain Performance

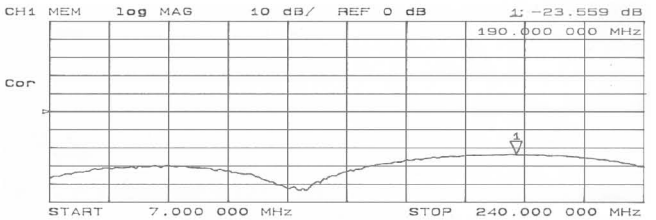
The 20-790/791 is suitable for measuring signals up to 155MBit/s. The most demanding tests are when measuring the return loss or pulse mask performance of a specific tributary. To succeed with these measurements exceptionally good bandwidth is required (this also applies to all system cabling!). Please contact Pickering if you require further assistance.



Typical Pulse Mask Measurement



Typical Insertion Loss For 1 Selected Tributary
(< 0.5dB at 0-240MHz)



Typical Return Loss For 1 Selected Tributary
(< 22dB at 0-240MHz)

Product Order Codes

8 Tributary Daisy-Chain Switch	
SMZ/Type 43 Version 75Ω	**20-790-711**
1.0/2.3 Version 75Ω	**20-790-741**
8 Tributary Switch + 8-Channel MUX	
SMZ/Type 43 Version 75Ω	**20-791-711**
1.0/2.3 Version 75Ω	**20-791-741**
8 Tributary Switch + 2-Channel MUX	
SMZ/Type 43 Version 75Ω	**20-791-711-S**
1.0/2.3 Version 75Ω	**20-791-741-S**
Options:	
Alternative connectors are available on many modules, e.g. 75Ω mini SMB. Please consult factory	**-C**

Mating Connectors & Cabling

75Ω 1.0/2.3 to 1.0/2.3 Lead, 1m length	**40-977-731**
75Ω SMZ to SMZ Lead, 0.5m length	**10-988-705**

Other lead lengths are available, please contact sales office

Latest Details

Please refer to our Web Site for Latest Product Details.
www.pickeringtest.com

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Pickering Interfaces maintains a commitment to continuous product development, consequently we reserve the right to vary from the description given in this data sheet.

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