Model 2990

SPECTRALinx®

L-Band Satellite
fiber optic transport link

- Model 2990 transports the full DBS spectrum (950-2200 MHz) as a standard feature.
- LNB power uses current limiting technology, eliminating down time due to blown fuses.
- 50 and 75 Ohm models can be configured for stand-alone or rack-mount enclosures for optimum system design flexibility.
- System transmits signals in excess of 35 or 60 km and increases the system's value for antenna remoting.

Model 2990: Stand-alone Transmitter, Stand-alone Receiver, and 3RU Rack Chassis Configuration

The *SPECTRA***Linx**® Model 2990 L-Band Satellite Transport System provides an economical solution for transporting digital signals for numerous satellite distribution applications, including headend relocation, distribution of digital broadcast systems (DBS), and distribution for personal communication services (PCS). The system utilizes a cost-effective coax cabling configuration to distribute the RF signals from the dish to the transmitter and from the receiver to the headend. The single-mode optical fiber between the 2990 transmitter and receiver allows transmission distances to 35 km for the 1310 nm version, and the 1550 nm transmitter allows transmission distance over 60 km. Furthermore, using LNB power from the transmitter decreases the need for additional equipment at the dish site. RF alarm and indicator LEDs allow for a quick assessment of the link's operational status. The *SPECTRA***Linx**® Model 2990 L-Band Transport System, whether used in an antenna remoting application or in a satellite distribution role, provides for transmission of the entire DBS spectrum in a simplified, flexible installation environment at one of the lowest costs found in today's market.

Available through **Multicom, Inc.**

Ph: 407-331-7779 Toll Free: 800-423-2594 Fax:407-339-0204 www.multicominc.com multicom@multicominc.com

Optical and Performance Characteristics*

	Min	Typ	Max	Units
75 Ohm Models				
I/O Impedance		75		Ohms
50 Ohm Models				
I/O Impedance		50		Ohms
All Models				
RF Gain Variation Over Temp	-2		+2	dB
1310 nm Models				
1 dB Compression Point		-15		dBm
Link RF Gain (0 dB Opt.. Loss)	+19	+26	+30	dB
Link RF Gain (-9 dBm Opt. Loss)	-5	+2	+6	dB
Optical Loss Range	0		18	dB
Noise Figure (+3 dBm Opt. Loss)		15		dB
Noise Figure (-9 dB Opt. Loss)		32		dB
Tz Opt Output Pwr.	+2	+3	+4	dBm
Rx Optical Input Power	-17		+3	dBm
Output Wavelength (Tx)	1280	1310	1340	nm
1550 nm and CWDM Models				
1 dB Compression Point		-20		dBm
Link RF Gain (+1 dBm Opt. Loss)	-15			dB
Link RF Gain (-11 dBm Opt. Loss)	-9			dB
Noise Figure (+3 dBm Opt. Loss)		19		dB
Noise Figure (-9 dB Opt. Loss)		36		dB
Tx Opt. Output Pwr.	0	+1	+2	dBm
Wavelength (1550 nm Tx)	1520	1550	1580	nm
Wavelength (CWDM Tx)	-3	Nominal	+3	nm

Electrical and Physical Characteristics*

	Min	Typ	Max	Units
Supply Voltage (Stand-alone)	+12		+22	V_{DC}
Supply Voltage (3RU Module)	+22	+24	+30	V_{DC}
Supply Current (Tx, No LNB)		100		mA
Supply Current (R)		100		mA
Weight (Stand-alone, including cable)		12.8		oz.
		363		g
Weight (3RU Module)		23.0		oz.
		652		g
Dimensions (Stand-alone)		5.25 x 2.56 x 1.25		in.
		133.4 x 65 x 31.8		mm
Dimensions (3RU Module)		5.06 x 9.13 x 1.36		in.
		128.4 x 231.8 x 35.3		mm

Environmental Characteristics*

	Min	Typ	Max	Units
1310 nm Tx, All Rx				
Operating Temp. Range	-40		+60	°C
1550 nm Tx				
Operating Temp. Range	-40		+40	°C
All Models				
Storage Temp. Range	-40		+60	°C
Humidity	5		95	%

Model 2990: 3RU Receiver with stand-alone receiver and transmitter

Ordering Information*

2990TB-SCAP	Stand-alone Tx, 75 Ohm Impedance, 1310 nm, LNB Power, FC/APC Connector
2990TB-SDAP	Stand-alone Tx, 75 Ohm Impedance, 1550 nm, LNB Power, FC/APC Connector
2990TC-SCAP	3RU Rack-mount, Tx, 75 Ohm Impedance, 1310 nm, LNB Power, FC/APC Connector
2990TC-SDAP	3RU Rack-mount, Tx, 75 Ohm Impedance, 1550 nm, LNB Power, FC/APC Connector
2990R-SFAP	Stand-alone, Rx, 75 Ohm Impedance, 1310/1550 nm, FC/APC Connector
2990RA-SFAP	3RU, Rx, 75 Ohm Impedance, 1310/1550 nm, FC/APC Connector
PS1850-1	Power Supply, +18 Volts, 500 mA DC Power Supply, 4-Pin Weidmuller Plug
2981CC-NN	3RU Rack Chassis, Slots for 1 Power Supply, 5-Pin Connector
2981CD-NN	3RU Rack Chassis, Slots for 2 Power Supplies, 5-Pin Connector
2981UC-NN	3RU Power Supply, Universal +24 Volts

*System performance specifications indicated for use with 9/125 μm single-mode fiber
See IOM2990 for complete performance specifications and part numbers.
Contact an Applications Engineer or visit our web site for complete specifications
on rack-mounting and power supply options.

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