2990 PRO

DBS L-Band Transport

SATCOM



The Model 2990 PRO L-Band Satellite Transport System provides an economical solution for transporting digital signals for numerous satellite distribution applications, including headend relocation, and distribution of digital broadcast systems (DBS). 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.

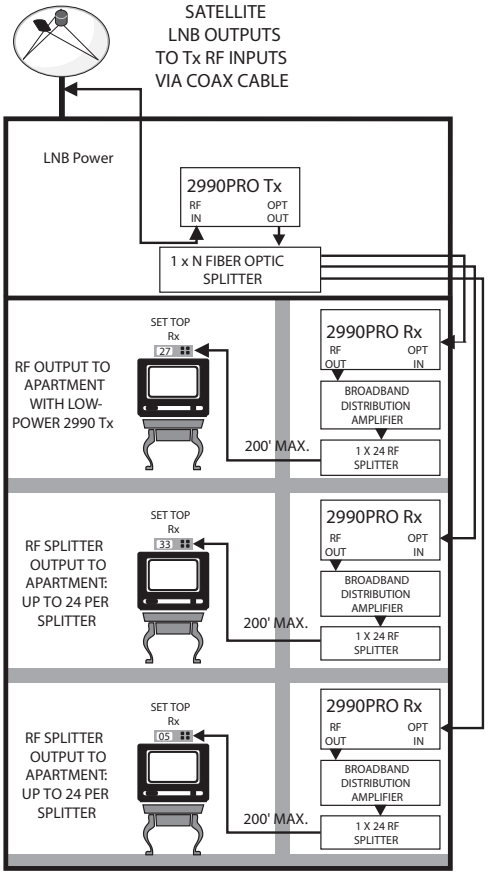
The single-mode optical fiber between the 2990PRO transmitter and receiver allows transmission distances to 35 km at 1310 nm. Furthermore, using LNB power from the transmitter decreases the need for additional equipment at the dish site. RF alarm and indicator LEDs allow for a quick assessment of the link's operational status. The Model 2990PRO 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.

Features

- Frequency 950-2200 MHz
- LNB power uses current limiting technology
- Selectable LNB voltage, +13V, Off and +17V
- Rugged stand-alone enclosure
- Optical loss budget in excess of 9 dB

Applications

- Small corporate TV video distribution
- Campus media retrieval systems
- Teleconferencing
- Return path transmitter for larger video systems.



Typical MDU Application

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Optical Characteristics

Parameter	Min	Typ	Max	Units
Operating Wavelength	-	1310	-	nm
Tx Optical Output Power	+2	+3	+4	dBm
Rx Optical Input Power	-20	-	+4	dBm
Optical Loss Range	0		9	dB

RF Characteristics

Parameter	Min	Typ	Max	Units
RF Bandwidth	950	-	2200	MHz
Amplitude Flatness	2.0	-	3.0	dB p-p
RF Input Range	-60	-	-15	dBm
System Gain (0 dB Optical Loss)	18	20	22	dB
System Gain (9 dB Optical Loss)	0	2	4	dB
System Gain variation over temperature	-2	-	+2	dB
Noise Figure (0 dB Optical Loss)	-	22	24	dB
Noise Figure (9 dB Optical Loss)	-	31	35	dB
Input 1 dB Compression	-	-8	-	dBm
Output 1 dB Compression	-	+11	-	dBm
Intermodulation Distortion[1]	-	-50	-40	dBc
Group Delay	-	0.5	1.0	ns
Tx Input Return Loss	-	-13	-10	dB
Rx Output Return Loss	-	-20	-15	dB

Physical Characteristics

Parameter	Min	Type	Max	Units
Weight		12.8 363		oz g
PhysicalDimensions		5.25x 2.56 x 1.25 133 x 65 x 32		in mm

Electrical Characteristics

Parameter	Min	Typ	Max	Units
Power Supply Voltage (Tx)	+23.0	+24.0	+25.0	VDC
Power Supply Current (Tx), no LNB		100	110	mA
Power Supply Current (Tx), LNB[1]		400	410	mA
Power Supply Voltage (Rx)	+23.0	+24.0	+25.0	VDC
Power Supply Current (Rx)		100	110	mA

Ordering Information

DBS Tx and Rx Options	Model Number
Tx, 1310 nm, SC/APC	2990P-T-1310-SA
Tx, 1310 nm, FC/APC	2990P-T-1310-FA
Rx, 1310 nm, SC/APC	2990P-R-SA
Rx, 1310 nm, SC/APC	2990P-R-FA

Environmental Characteristics

Parameter	Min	Type	Max	Units
Operating Temp. Range	-40	-	+60	°C
Storage Temp. Range	-45	-	+70	°C
Relative Humidity	5	-	95	%

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