



5190

5191

Features

Input/Output ports	12x48 Transmitter & 48x12 Receiver
Configuration	12x48 Non-blocking Full Fan-Out 48x12 Non-blocking Full Fan-In
Operating Frequency	950-2050 MHz (L-band)
Manual Control	LCD Touch Screen
Remote Control	RS-422
Impedance	50-Ohm

Part Numbers

5190 (Receiver)	5191 (Transmitter)
-----------------	--------------------

Application

The L-band non-blocking fan-out transmitter and fan-in receiver model is ideal for Teleport SATCOM applications with a narrow band operating frequency of 950-2050 MHz. The transmitter 19" rack is configured with 12 inputs and 48 outputs and the second 19" rack is the receiver tower with 48 inputs and 12 outputs.

Each rack is integrated using modular approach consisting for the following sub-modules:

5190/5191: Both Receiver and Transmitter

Power supply module, Signal monitor panel and Fiber optic receiver

5190: Receiver Only (48x12)

4x 12x12 fan-in module, Main controller and L-Band amplifiers

5191: Transmitter Only (12x48)

4x 12x12 fan-out module and Slave controller

RF Characteristics (5190 & 5191)

VSWR (max)	1.8:1 input & output
Isolation (min)	55 dB input/input
	60 dB input/output
	55 dB output/output (different input)
	40 dB output/output (common input)
Gain, any path	0 dB ± 2.5 dB
Power, Operating (max)	+12 dBm routed to 1 output (fan-in)
Power, no damage (max)	+15 dBm routed to 1 output (fan-in)
1dB Compression (min)	+10 dBm output
3rd Order Intercept (min)	+21 dBm output
Noise Figure (max)	17 dB (12x48)
	21 dB (48x12)

Specifications

Relay Type	Solid State
Other Components	Amplifiers, Power Dividers & Power Combiners
I/O Connector Type	SMA female
Dimensions (max)	19" wide full rack 21" Depth Height: 16U fan-in /16U fan-out segments plus more modules
Operating Temperature	0 °C to +50 °C
Storage Temperature	-40 °C to +50 °C
Operating Humidity	10-80% non-condensing

Local Control	6.5" LCD Touch Screen USB port for keyboard or mouse
Remote Control	RS-422 with DB9 male
Commands/Syntax	Dow-Key SCPI commands
Operating System	Microsoft Windows
Hard drive	160 GB (min) SATA HD / removable
CPU/ Memory	Embedded Intel processor / 2G RAM (min)
Power Supply	120-240 VAC, 50-60 Hz, 3-6 A, 350 W / 12V & 50 W / 5 V, redundant power supplies
Fuse	Accessible/replaceable on the rear
Cooling / Venting	As needed within each module