



5190

5191

## Features

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

## Part Numbers

5190 (Receiver)	5191 (Transmitter)
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## 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)

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

## Specifications

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

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