



### Features

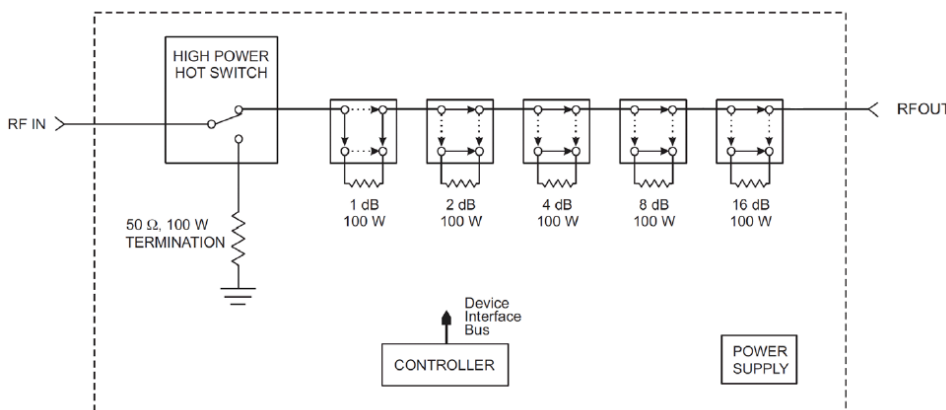
- Provides a flexible, easy to program, low cost solution for your bench test/calibration setups and subsystem applications.
- 0-31 dB
- Lower Insertion Loss
- Relative vs. Nominal attenuation step function.
- DC to 12.0 GHz Operation
- High Accuracy & Repeatability
- Power Handling up to 100 Watts average
- Designed to interface with industry standard communication interfaces:
- TCP/Telnet/RESTful HTTP/Serial/USB
- Available in Front, Rear and Through configurations
- Rack Configurable: A Rack Mounting Kit is included for easily mounting into any rack or cabinet that is designed per EIA RS-310 or MIL-STD-189.

### Applications

- 4G LTE/5G Base Station Radio testing
- Ideal for Automated Test Equipment (ATE)
- Engineering / Production Test Lab Environments

### Description

This product is a high-power, hot switching, broadband programmable attenuator. When the the controller requests a new attenuation level the input switch terminates the input signal into a 50 Ohm load. (See Figure 1) This input switch is hot switchable at 100 Watts of input power. This will remove the high power signal from the main signal path. With no signal connected to the attenuator path the controller then commands the series of relays to configure the attenuator for the requested attenuation value. Then the input switch reconnects the input signal to the attenuator path. The system can be operated with either a remote controller or through front panel control.



**Model Number Description:**  
**Example: 8343 - 31 - X**

Base Model Number	Attenuation Value (dB)*	Connector Location
8343	31	X
		F = Front
		R = Rear
		T = Through

*\* Available in 0-31 dB configuration only!*

Figure 1. Model 8343 Block Diagram

Note: If power failure should occur, the unit will remain in the last selected attenuation state.

**Model 8343**

Specification	Description			
<b>Input Power Requirements</b>	<b>AC:</b>	100 to 240 VAC, 50/60 Hz, 50 Watts		
<b>Control</b>	<b>Connector:</b>	TCP/Telnet/RESTful HTTP/Serial/USB		
	<b>Protocols:</b>	Message-based IEEE 488.2 compatible		
<b>RF Characteristics</b>	<b>Connectors:</b>	Type N, Female		
	<b>Frequency Range:</b>	DC - 12 GHz		
	<b>Impedance:</b>	50Ω		
	<b>SWR:</b>	DC - 4 GHz: 1.60:1 (Maximum) 4 GHz - 12 GHz: 2.30:1 (Maximum)		
	<b>Attenuation Range:</b>	31 dB/1 dB steps DC MHz - 4 GHz: 100 Watts (Maximum)		
	<b>RF Power Rating:</b>	4 GHz - 12 GHz: 50 Watts (Maximum)		
	<b>Attenuation Settings:</b>	100, 000 selections (minimum)		
	<b>Attenuation Update Rate:</b>	1 second (Typical)		
	<b>Incremental Accuracy:</b>	<b>Frequency</b>	<b>1-15 dB</b>	<b>16-31 dB</b>
		DC - 4 GHz:	±0.6 dB	±0.8 dB
	4 GHz - 12 GHz:	±2.5 dB	±3.0 dB	
<b>Insertion Loss (dB):</b>	<b>Frequency Range</b>	<b>8343-15-X</b>		
	DC - 4 GHz:	2.5		
	4 GHz - 12 GHz:	4.0		
<b>Environmental</b>	<b>Operating Temperature:</b>	0 to +50°C		
	<b>Storage Temperature:</b>	67° to +167 °F (-55° to +75°C)		
	<b>Humidity:</b>	96%		
	<b>Altitude:</b>	40,000' (12,192M)		