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CT718 LANforge-Attenuator with 8 Attenuator Channels: 50 MHz - 8 GHz

The CT718 RF Attenuator is used to attenuate (decrease) the RF signal between wireless devices. The two SMA ports for a given channel are on opposite sides of the attenuator. This is helpful when mounting the attenuator on the side of RF Chamber stacks. A summary of the technical specifications is below:

Max RF Power:	+34 dBm
Impedance:	50 Ω
Frequency Range:	50 MHz – 8.0 GHz
Attenuation Range:	0 – 95 dB
Attenuation Steps:	0.25 dB increments

The CT718 may be controlled through software access over the USB-Serial port or Ethernet. The included LANforge software suite supports automated scripting as well as manual configuration of the attenuator modules.

The CT718 should be used with an RF enclosure to prevent the devices connected to the attenuator from bypassing the RF attenuator using over-the-air RF leakage.

The CT718 has no moving parts and will fit into a small travel bag or briefcase for easy portability.

The CT718 includes a USB Cable for both management and power supply. If powering many attenuators, a powered USB hub should be used. PoE Ethernet is also supported.

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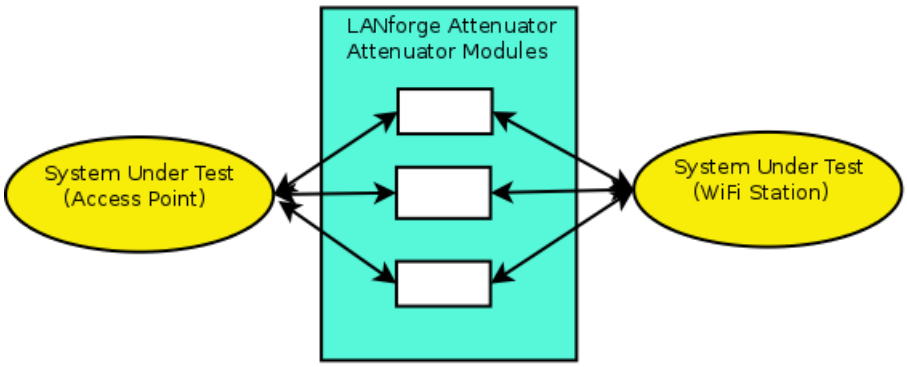
NOTE: This product may have a different hardware configuration than the system pictured above.

Refer to your official quote for details.

Example Network Diagram

LANforge RF Attenuator.



The LANforge attenuator sits between two RF systems, often a WiFi AP on one side and WiFi Station on the other. The attenuator and WiFi stations are connected by shielded SMA-Male cables. Adjust the attenuation as desired either with the LANforge GUI or direct access over serial.

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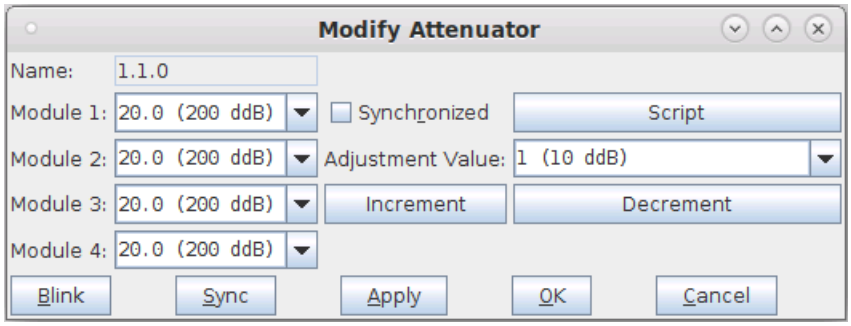
Quick Start Guide

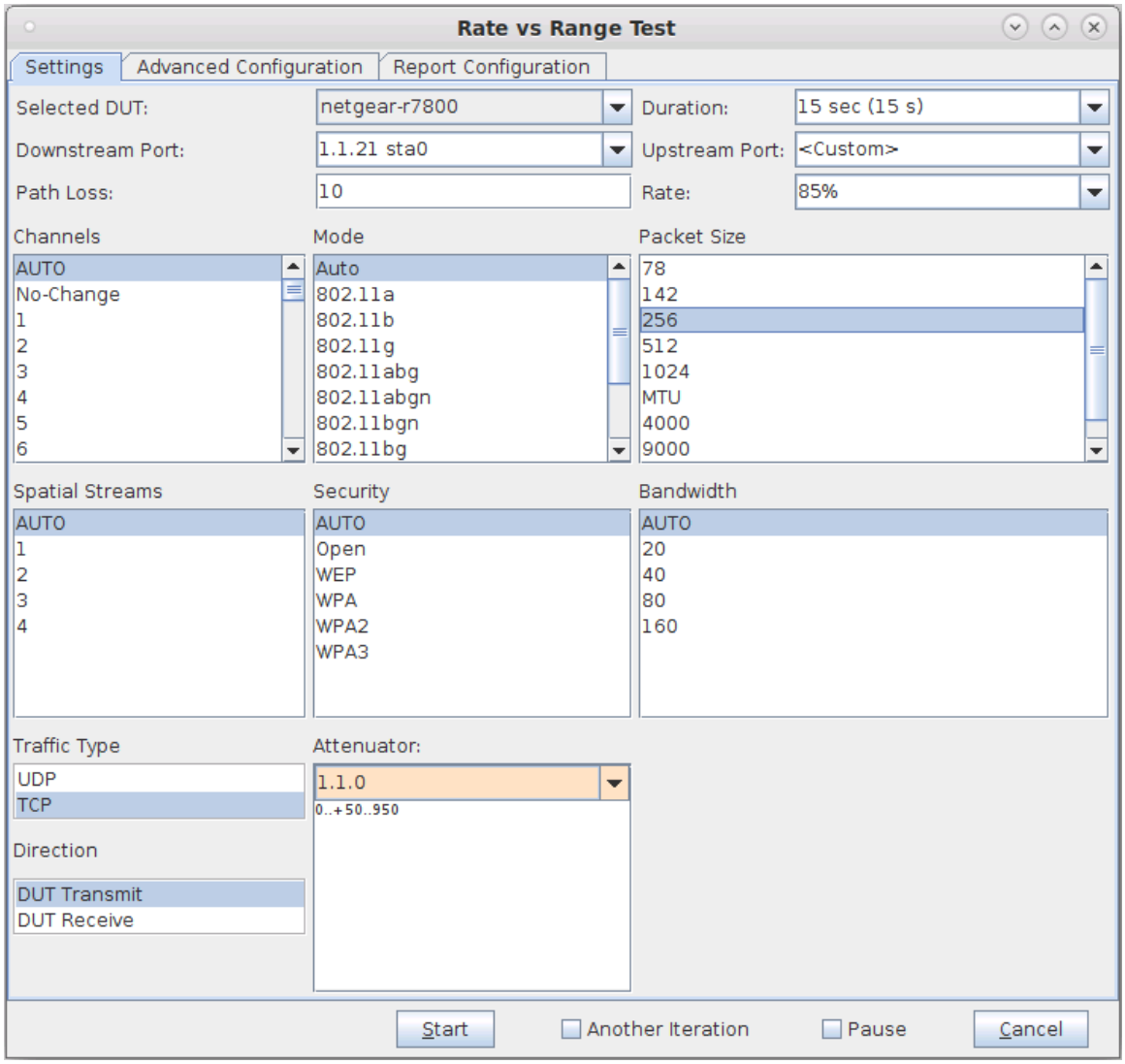
1. Connect the CT718 to a Linux system running LANforge with the included USB cable. The USB cable allows control of the CT718. The USB cable also provides power so no other power cable is required. PoE Ethernet connectivity may also be used.
2. Connect the attenuator pairs: One side to one system and the other side to another system or antennas.
3. Open a LANforge GUI and connect to the Linux system with the CT718.
4. If using USB, the attenuator should be automatically discovered. If using Ethernet, then click the Discover button. In the Attenuator tab, you should see the CT718 device appear. Modify it to set attenuation values manually and/or configure a script to change attenuations automatically.
5. One useful feature for the CT718 is the Rate vs Range test in Chamber View. The second screenshot below shows the possible options this feature gives. For more information, please see Testing Rate vs Range throughput for a WiFi Device.

LANforge-Attenuator Related Images

LANforge Attenuator Configuration Screen



LANforge Attenuator Rate vs Range Test



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Software Features

1. Using Rate vs Range, an AP can be tested how well it can transmit packets at different signal levels for transit and receive.
2. Emulate mesh node distance.
3. Test device roaming between APs.
4. Test how well the AP can receive packets with different MCS at different RF Signal levels.

Hardware Specification

1. RF Attenuator with 0.05 Ghz to 8 Ghz.
2. USB-Serial console (115200 8 N 1) for scripting and automated control. PoE Ethernet also supported.
3. SMA port pairs are on opposite sides, good for mounting on the sides of chambers.
4. Weight: 3 lbs or 1.36 kg.
5. Dimensions: 11.7 x 3.5 x 1 inches Metric: 296 x 89 x 24 mm.
6. Operating Temperature: 0 ~ 60°C.
7. Operating Humidity: 10 ~ 90%.

8. Certification: RoHS.

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Impedance:	50 Ω			
Frequency Range:	50 MHz – 8.0 GHz			
Attenuation Range:	0 – 95 dB			
Attenuation Steps:	0.25 dB increments			
Insertion Loss (dB):	**Frequency**	**Typical**		**Max**
	50 Mhz	4.2		4.5
	2400 Mhz	6.1		6.5
	6000 Mhz	8.5		10.0
	8000 Mhz	10.0		10.8
Attenuation Accuracy (dB):	**Frequency**	**Conditions**	**Typical**	**Max**
	50 - 2000 Mhz	0.25 - 20	±0.25	±(5.5% of Atten. + 0.25)
		20.25 - 60	±0.50	±(2.0% of Atten. + 0.90)
		60.25 - 90	±0.75	±(3.5% of Atten. + 0.70)
	2000 - 4000 Mhz	0.25 - 20	±0.20	±(5.5% of Atten. + 0.25)
		20.25 - 60	±0.30	±(2.0% of Atten. + 0.70)
		60.25 - 90	±0.40	±(3.0% of Atten. + 0.90)
	4000 - 8000 Mhz	0.25 - 20	±0.15	±(6.5% of Atten. + 0.15)
		20.25 - 60	±0.35	±(3.5% of Atten. + 0.45)
		60.25 - 90	±0.65	±(3.5% of Atten. + 0.90)

List Price: $9,495 List Price with 1 Year support (17%): $11,109

Additional Feature Upgrades

Unless otherwise noted in the product description, these features usually cost extra:

- WanPaths (LANforge-ICE feature set)
- Virtual Interfaces: MAC-VLANs, 802.1Q VLANs, WiFi stations, etc
- FIRE Connections: Base FIRE license includes 1000 active connections.
- LANforge-ICE Network Emulation.
- VOIP: Each concurrent call over the included package requires a license.
- VoIP-Mobile Audio Quality Testing using POLQA/PESQ.
- Mobile-Mobile Audio Quality Testing using POLQA/PESQ.
- Armageddon: Each pair of ports requires a license if not already included.
- RF Chambers for WiFi testing.
- External battery pack: 12+ hours for CT520, CT523, CT92X and other platforms.

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