

Network Testing and Emulation Solutions



The CT703 RF Attenuator is used to attenuate (decrease) the RF signal between wireless devices. The CT703 uses 3 of the ATS0760-95 modules from EUBUS. A summary of the technical specifications is below:

Impedance:	50 Ω
Frequency Range:	0.7 GHz - 6.0 GHz
Attenuation Range:	0 - 95.5 dB
Attenuation Steps:	0.5 dB increments
Insertion Loss:	8 dB nominal, 10 dB max
Attenuation Accuracy:	1-15 dB: ±1dB, 16+ dB: ±1.5dB or 4%

The CT703 may be controlled by the two knobs on the faceplate and may also be controlled through software access over the USB-Serial port. The included LANforge software suite supports automated scripting as well as manual configuration of the attenuator modules.

The CT703 has no moving parts and will fit into a small travel bag or briefcase for easy portability.

The CT703 includes 6 RP-SMA Plug to RP-SMA Plug patch cables, USB Cable, and external power supply (brick).

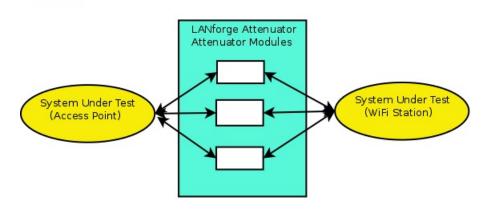


NOTE: This product may have a different hardware configuration than the system pictured above. Refer to your official quote for details.

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### **Example Network Diagram**





The LANforge attenuator sits between two RF systems (often WiFi AP on one side and WiFi Station on the other. Connect shielded RP-SMA Plug cables between the Attenuator and WiFi Stations. Adjust the attenuations as desired using Attenuator knobs and/or use a program to adjust the values over the USB-Serial connection.

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#### **Quick Start Guide**

- 1. Connect 9v 1A DC Power brick.
- 2. Optionally: Connect USB cord to Linux PC for managing through LANforge or other program.
- 3. Connect the Attenuator pairs: Top SMA connector to one system, bottom to the other.
- 4. Adjust menu with top knob to 'All' or individual modules and use bottom knob to adjust attenuation settings.

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# LANforge-Attenuator Related Images

#### LANforge-GUI Attenuator Configuration Screen

	Mo	dify Attenuator	_ 🗆 ×
Name:	1.1.3		
Module 1:	43.5 (435 ddBm)	<ul> <li>Synchronized</li> </ul>	
Module 2:	43.5 (435 ddBm)	<ul> <li>Adjustment Value 50 (50 ddBm)</li> </ul>	▼ Adjust
Module 3:	43.5 (435 ddBm)	•	
	Sync	Apply OK	Cancel

LANforge-GUI 2544 Script with Attenuation

Add/Modify Script						
Endpoint Name:	udp-se-s-A	Script Type:	RFC-2544	-		
Script Name:	my-script	Group Action:	All	-		
🗹 Enable Script 🕑 Show	v Reports 🛛 Symmetric 🗌	Loop 🗌 Hide Iteration Details 🗌	Hide Legend 🗌 Hide CSV			
Script Iterations:	192	Estimated Duration:	38.4 m			
Script Configuration						
Run Duration:	10 s (10 s)	Pause Duration:	2000 (2 s)	-		
Max Drop Percent:	10% (10%)	Max-Tx-Underrun:	10% (10%)	-		
Max Jitter:	200ms (200 ms)	▼ Max RT Latency:	200ms (200 ms)	-		
Max Failed OK:	0	•				
Rates A	Rates B           bps           400000000 (400 Mbps)	Payload Sizes A         Payl           1472 (1.438 KB)         9000 (8.	oad Sizes B         Attenuation           789 KB)         1.1.3           0+5955	ons (ddBm)		
S	how Previous Report	Sync Apply	OK Cancel			

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## **Software Features**

### **Hardware Specification**

- 1. RF Attenuator with 0.7Ghz to 6 Ghz.
- 2. Includes 3 ATS0760-95 RF Attenuation modules from EUBUS.
- 3. Controlled by Arduino-Mega micro-controller and custom electronics boards.
- 4. USB-Serial console (115200 8 N 1) for scripting and automated control.
- 5. 2 rotating knobs for manual adjustment.
- 6. LCD Screen for display of current settings.
- $7.\$ High-Quality aluminum chassis with extruded body and 2.4mm thick faceplates.
- 8. Internal RF connectors are highly shielded semi-rigid SMA cables.
- 9. +9v 1AMP external power supply (brick). May also be powered from 500ma USB port.
- 10. Weight: 3 lbs or 1.4 kg.
- 11. Dimensions:  $9 \ge 9.5 \ge 3$  inches Metric:  $240 \ge 230 \ge 80$  mm.
- 12. Operating Temperature:  $0 \sim 40^{\circ}$ C.
- 13. Operating Humidity:  $10 \sim 90\%$ .
- 14. Certification: RoHS.

ATS0760-95 module specifications:

Impedance:	50 Ω
Frequency Range:	0.7 GHz - 6.0 GHz
Attenuation Range:	0 - 95.5 dB
Attenuation Steps:	0.5 dB increments

Insertion Loss:	8 dB nominal, 10 dB max	
Attenuation Accuracy:	1-15 dB: ±1dB, 16+ dB: ±1.5dB or 4%	1

List Price: \$4,995 List Price with 1 Year support (17%): \$5,844

## **Additional Products**

For a more complete WiFi testing setup, you may wish to consider the CT711 RADAR Simulator, CT523 and CT525 series WiFi traffic generators.

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