

## CT704 LANforge-Attenuator with 4 Attenuator Modules: 0.7Ghz to 6Ghz

The CT704 RF Attenuator is used to attenuate (decrease) the RF signal between wireless devices. The CT704 uses 4 of the [ATS0760-95](#) modules from EUBUS. A summary of the technical specifications is below:

Impedance:	50 $\Omega$
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: $\pm 1$ dB, 16+ dB: $\pm 1.5$ dB or 4%

The CT704 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 CT704 has no moving parts and will fit into a small travel bag or briefcase for easy portability.

The CT704 includes 8 RP-SMA Plug to RP-SMA Plug patch cables, USB Cable, and external power supply (brick).



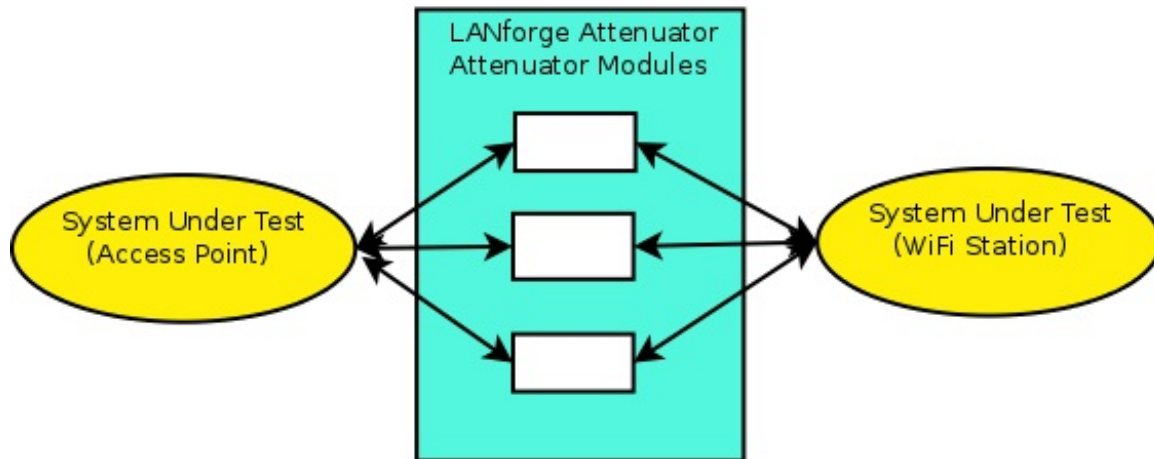
NOTE: This product may have a different hardware configuration than the system pictured above.

Refer to your official quote for details.

## Example Network Diagram



### LANforge RF Attenuator.



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.

## 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

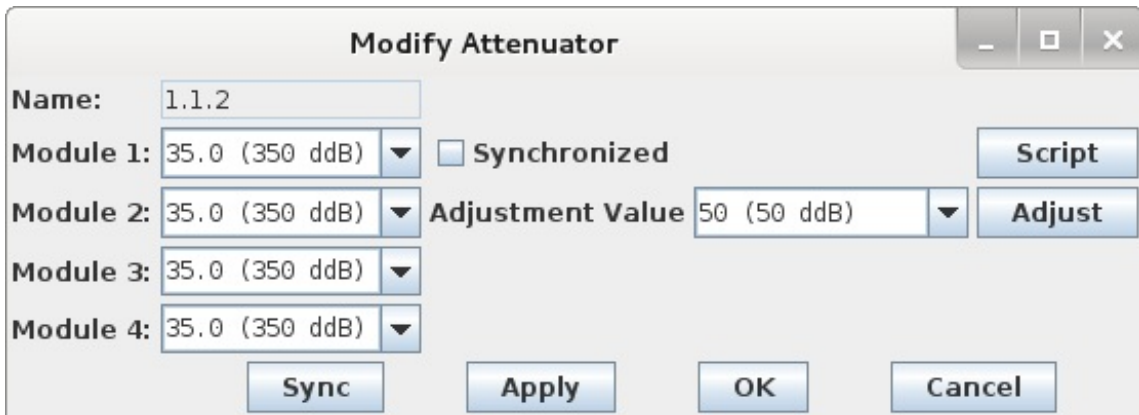
attenuation settings.

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Candela Technologies Inc., 2417 Main Street, Suite 201, P.O. Box 3285, Ferndale, WA 98248, USA  
www.candelatech.com | sales@candelatech.com | +1 360 380 1618

## LANforge-Attenuator Related Images

### LANforge-GUI Attenuator Configuration Screen



The screenshot shows a window titled "Modify Attenuator" with standard window controls (minimize, maximize, close) in the top right corner. The window contains the following fields and controls:

- Name:** A text input field containing "1.1.2".
- Module 1:** A dropdown menu showing "35.0 (350 ddB)".
- Module 2:** A dropdown menu showing "35.0 (350 ddB)".
- Module 3:** A dropdown menu showing "35.0 (350 ddB)".
- Module 4:** A dropdown menu showing "35.0 (350 ddB)".
- Adjustment Value:** A text input field containing "50 (50 ddB)".
- Synchronized:** An unchecked checkbox.
- Buttons:** "Script", "Adjust", "Sync", "Apply", "OK", and "Cancel".

### LANforge-GUI 2544 Script with Attenuation

**Add/Modify Script**

Endpoint Name:  Script Type:

Script Name:  Group Action:

Enable Script  Show Reports  Symmetric  Loop  Hide Iteration Details  Hide Legend  Hide CSV

Script Iterations: **192** Estimated Duration: **38.4 m**

**Script Configuration**

Show Dups  Show 000  Show Attenuation  Hide Latency Distributions  Hide Constraints

Run Duration:  Pause Duration:

Max Drop Percent:  Max-Tx-Underrun:

Max Jitter:  Max RT Latency:

Max Failed OK:

Rates A	Rates B	Payload Sizes A	Payload Sizes B	Attenuations (ddBm)
<input type="text" value="56000 (56 Kbps)"/>	<input type="text" value="400000000 (400 Mbps)"/>	<input type="text" value="1472 (1.438 KB)"/>	<input type="text" value="9000 (8.789 KB)"/>	<input type="text" value="1.1.3"/> <input type="text" value="0..+5..955"/>

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## Software Features

## Hardware Specification

1. RF Attenuator with 0.7Ghz to 6 Ghz.
2. Includes 4 **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 x 9.5 x 3 inches Metric: 240 x 230 x 80 mm.
12. Operating Temperature: 0 ~ 40°C.
13. Operating Humidity: 10 ~ 90%.
14. Certification: RoHS.

**ATS0760-95** module specifications:

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List Price: \$6,995    List Price with 1 Year support (17%): \$8,184

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## 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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