

MT-62A

DIGITAL ATTENUATOR

Programmable Digital
Attenuator
200 to 6000 MHz

OVERVIEW

The MT-62A programmable digital attenuator is a completely shielded, high performance, digitally controlled, 2-channel RF attenuator system. It is intended for any automated RF testing where high accuracy signal power control is needed. The MT-62A offers very good attenuation accuracy, high dynamic range and speed. The high performance of the attenuator is obtained through a high precision attenuator design and calibration.

Applications

- Wi-Fi up to 802.11be and cellular technologies (GSM, UMPs, LTE-FDD, LTE-TDD, 5G-FR1) testing
- Throughput vs Range measurements
- Wi-Fi or Cellular Roaming measurements
- Mesh, Band-steering
- Receiver Sensitivity Measurements
- System design or device verification testbeds
- Engineering Development and Automated Manufacturing Test



Key Features/Benefits

- Frequency range: 200MHz to 6000MHz
- Number of individual channels: 2
- Dynamic Range: 95 dB
- Step: 0.25 dB
- Insertion loss: 4.5dB at 2.4 GHz & 6dB at 6 GHz
- 0.1 dB compression: 34 dBm
- IP3: 58 dBm
- PoE Powered and Ethernet or USB Interface
- Programmable via Browser or APIs
- Completely shielded and very good accuracy
- Supports Windows, Linux and Mac OS

SPECIFICATION

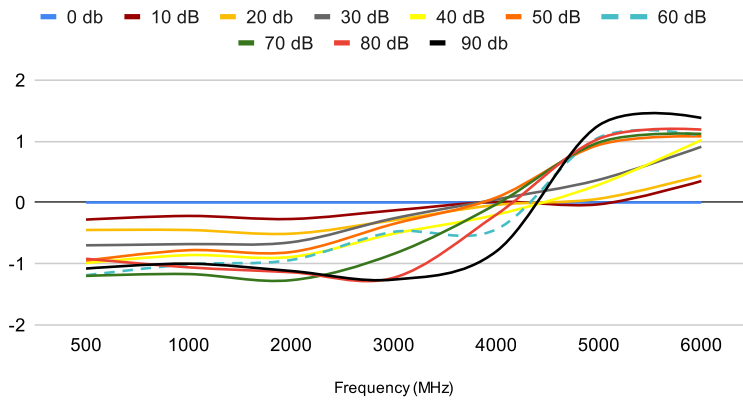
| Parameter | | Min | Typ | Max |
|--------------------------------------|---|------|---------------------------------------|-----------|
| Frequency Range (MHz) | | 200 | | 6000 |
| Impedance (Ω) | | | 50 | |
| Channels | | | 2 | |
| Attenuation Range (dB) | | 95 | | |
| Shielding (dB) | | | 110 | |
| Isolation between Channels (dB) | | | 90 | |
| Step Size (dB) | | 0.25 | | |
| Insertion Loss (dB) | < 2.5 GHz | | 4.5 | 6 |
| | < 6 GHz | | 6 | 7 |
| Attenuation Accuracy (dB) | | | ± 0.25 | ± 1.5 |
| Switching Speed (μ s) | | | 2 | |
| Maximum Input Level (dBm) | | | +28 (operating) +33 (absolute max) | |
| Input IP3 (dBm) | | | 58 | |
| Operating modes | Uni/Bi-Directional GUI control or APIs | | | |
| Power | Power over Ethernet (PoE) | | | |
| Operating Temperature | -30 °C to +70 °C | | | |
| RF connectors | SMA | | | |
| Control Interface | Ethernet or USB | | | |
| Operating System | Windows, Linux and Mac | | | |
| Custom APIs as per user requirements | Yes | | | |

CONNECTIONS

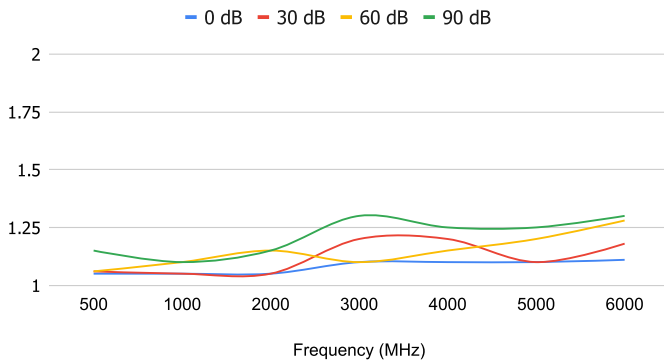
| Port Name | Connector Type |
|---------------------------|------------------------|
| RF in | SMA female |
| RF out | SMA female |
| USB | USB type Mini-c female |
| Network (Ethernet/LAN) | RJ45 socket |

PERFORMANCE CURVES

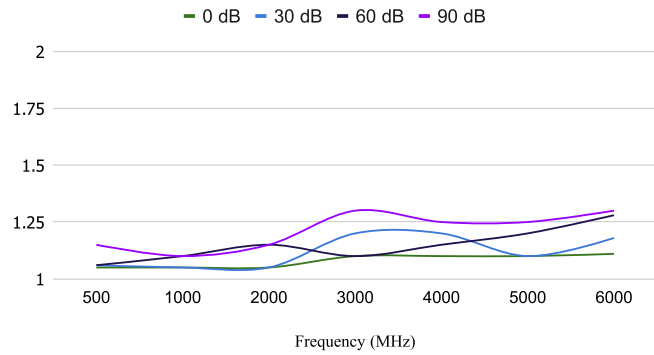
Attenuation accuracy vs frequency



OUTPUT VSWR



INPUT VSWR



Frequency vs Insertion Loss

