

eubus NAM4 – Network Attenuator Module

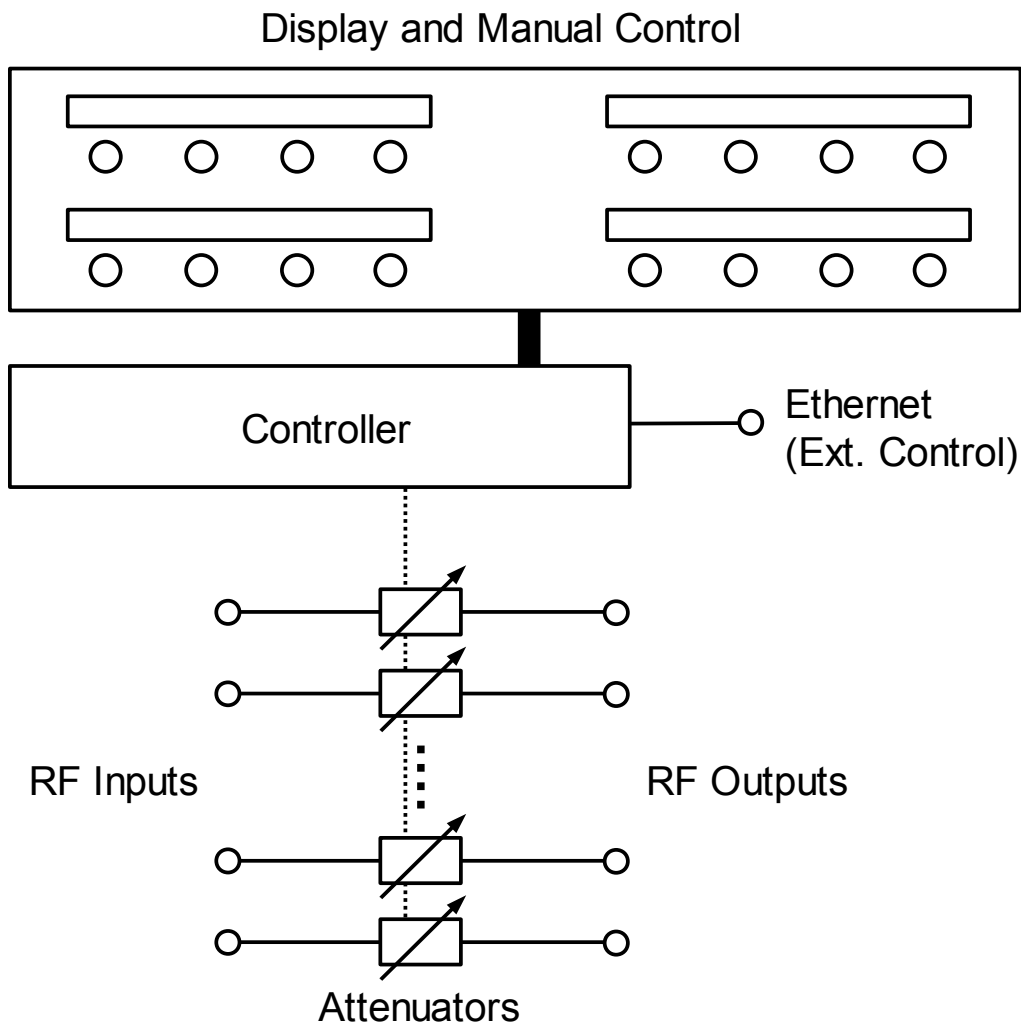
The eubus NAM4 has between 4 and 16 precision attenuators and 4 up to 16 inputs and outputs that permit complex radio hop simulations such as it is required for handover test scenarios.

The system can be linked up and controlled via Ethernet and thus easily integrated in a network.

A NAM4 can be controlled remotely from a standard terminal program, a web browser or the eubus Controller Software. Our open interface protocol can be used to implement the NAM4 in existing systems.

However, the NAM4 can also be operated manually whenever necessary.

The frequency range is 0.38-3.0GHz or 0.7-6.0GHz



Features:

- Precision electronically switchable attenuator system for RF applications
- Designed for easy to use radio hop simulations and handover scenarios
- Frequency range: 0.38 – 3.0GHz with 0.5dB increments or 0.7 – 6.0 GHz with 1dB increments
- Maximum attenuation: 0.38 – 3.0GHz: 95.5dB, 0.7 – 6.0 GHz: 63dB
- Standard version of 4 to 16 precision attenuators with 4 to 16 inputs and outputs
- Attenuation and offset can be set by multifunctional knobs or remotely by Ethernet
- Firmware update function implemented (over Ethernet)
- Comes with flexible steering software
- Attenuation values can be stored
- Suitable for any lab or field application
- Very flexible and adaptable
- Compact and stable 19" housing
- A low cost "Manual Attenuator System", MAM4 without Ethernet connection and steering software is also available

The NAM4 system was designed to simulate the conditions of a radio hop in all current and future radio networks including GSM, DCS, UMTS, WLAN, WiMAX, Bluetooth and UMTS LTE. The system offers 4 to maximum 16 inputs and outputs, works in the millisecond range and can be used either in the lab or as mobile unit in field applications.

The included NAM Controller Software can be used to create professional long term tests that run automatically for a specific period for the purpose of load simulations etc. In addition, multiple tests can run in parallel.

Technical Data:

Type	NAM4
Frequency Range	0.38 – 3.0GHz or 0.7 – 6.0GHz
Attenuation	up to 95.5dB in 0.5dB increments (3GHz) up to 63dB in 1.0dB increments (6GHz)
Insertion Loss	< 6dB (1GHz), <7.5dB (6GHz)
Impedance	50 Ohm
RF Connectors	N(f), SMA(f) or customized Front or Backside
Input Power	max. 100mW average
Frequency Bands	GSM (450, 900, 1900 MHz), UMTS, WLAN, WiMAX, Bluetooth, UMTS LTE
Ambient Temperature	0°C ... +50°C
Power Supply	100V – 240V, 47Hz - 63Hz
Housing	19" aluminum with 2U to 6U, depending on required channels
Delivery Package	NAM4 system, NAM controller software and power cable
Warranty	12 months

Customer specific versions are available on request

Example:

NAM4-16 with SMA(f) on Front

