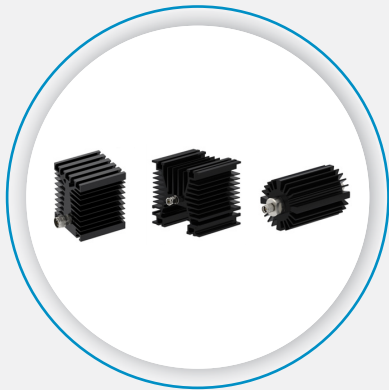


# MEDIUM & HIGH POWER ATTENUATORS

Outstanding Performance and Quality at a Competitive Price



*Radiall released a new range of attenuators up to 6 GHz, from 30 to 150 W, available with Type N, SMA and TNC connections. This comprehensive offer ensures outstanding performance and quality at a competitive price.*

Medium and high power attenuators from 30 to 150 W, up to 6 GHz:

- Available with 3 types of connections: Type N, SMA and TNC (male and female interfaces)
- Custom design available upon request
- Range of attenuation from 3 to 30 dB

Electrical Performance / Requirements:

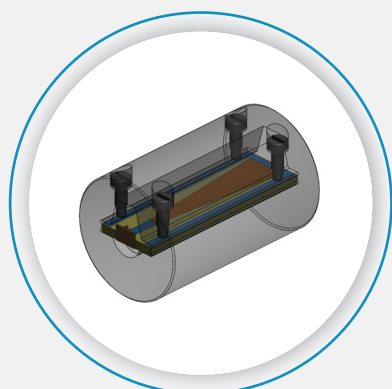
- Frequency range: DC-6 GHz
- VSWR max: 1.25 @ 6 GHz
- Peak power: 2 kW
- Impedance: 50 Ohms

		TYPE N	SMA	TNC
Power	Cooling			
30 watts	Convection	R422XXX010	R4222XX010	R4221XX010
50 watts	Convection	R422XXX020	R4222XX020	R4221XX020
100 watts	Convection	R422XXX030	R4222XX030	R4221XX030
150 watts	Convection	R422XXX040	R4222XX040	R4221XX040

XXX / XX = Coef attenuation; coef = 3 dB => 003/03

## THERMAL CONDUCTIVITY COMPARISON

Radiall's improved design concept utilizes aluminum nitride in the resistive circuit. By employing this concept, Radiall has improved the cooling capabilities of the coaxial attenuator's core. This provides better aging performance, increases the device's lifetime and robustness and enables Radiall to reduce the device's overall size for applications where form factor is an essential requirement. The reduced footprint, outstanding electrical performance and competitive pricing make Radiall's new high power attenuators the perfect solution for microwave applications.



Attenuator Module

*Radiall's new range of medium and high power attenuators increases possibilities for the defense, telecom and measurement markets.*

AVERAGE POWER @25 °C (W)	30	50	100	150
Operating frequency (GHz)	DC - 6			
V.S.W.R.	1.25 up to 6 GHz			
Attenuation	3 / 6 / 10 / 20 / 30 dB			
Deviation ( $\pm$ dB)	0.5 / 0.75 / 0.75 / 1.5 / 2.2			
Impedance ( $\Omega$ )	50			
DC resistance ( $\Omega$ )	50 $\pm$ 5%			
Peak power @ 25 °C (1 $\mu$ s, 1%) (kW)	2			
Operating temperature range (°C)	-55 / +125			
Storage temperature range (°C)	-55 / +125			

## MECHANICAL CHARACTERISTICS

- Rugged construction
- Small form factor

The design concept for Radiall's new medium and high power attenuators utilizes mechanical force to restrain the ceramic resistance against the module. This solution improves the life performance of the attenuator versus common solutions using compound or crimp. A spring is used at the extremity of the module to compensate for temperature shrinkage while increasing the product's robustness and life cycle.

## FEATURES & BENEFITS

- Compatible with several types of connections
- Custom models available on demand
- Excellent electrical performances
- Competitive price
- Robust design

## APPLICATIONS

- Military radar
- Test & Measurement of any telecom and military equipment
- Instrumentation radio frequency equipment