YSFA500-18-XX-N

Fixed Attenuator, DC-18 GHz, 500 W, N-Type Connector

Key Features

- DC to 18 GHz Ultra-Wideband
- 500 W High Power Handling
- Low VSWR & Stable Attenuation
- Flexible Cooling Options

Applications

- RF and microwave test systems
- Millimeter-wave communication
- Signal conditioning in RF chains
- Instrumentation protection
- Aerospace and defense systems

Electrical Specifications		
1	Nominal Impedance	50 Ω
2	Average Power[1]	500 W @ 25°C
3	Frequency Range	DC-18 GHz
Environmental Specifications		
1	Operating Temperature	-55°C to +125°C
Mechanical Specifications		
1	Connectors	N-Type Male to Female Other configurations available upon request
2	Body Material	Connector: Brass Heat Sink: Black Anodized Aluminum
3	Dimension	Outline A:564×110×120 mm / [22.2×4.33×4.72 in] Outline B:435×130×220 / [17.13×5.12×8.66 in]

Attenuation, Accuracy & VSWR Without Fan				
Attenuation (dB)	Accuracy(dB)			
	DC-4 GHz	DC-8 GHz	DC-12.4 GHz	DC-18 GHz
10	-0.6~+1.5	±2.5	±4.0	±6.0
20	±1.2	±2.0	±2.0	±5.0
30	±1.0	±1.1	-1.5~+2.0	0~+6.0
40,50,60	±1.0	±1.1	±1.2	±1.5
VSWR	≤1.25:1	≤1.30:1	≤1.35:1	≤1.50:1

Attenuation,Accuracy & VSWR With Fan[2]				
Attenuation (dB)	Accuracy(dB)			
	DC-4 GHz	DC-8 GHz	DC-12.4 GHz	DC-18 GHz
10	±0.7	±0.8	±2.5	±3.0
20	±0.7	±0.8	±0.9	±3.0
30	±0.8	±0.9	±1.0	±1.5
40,50,60	±0.9	±0.9	±1.1	±1.5
VSWR	≤1.20:1	≤1.25:1	≤1.35:1	≤1.45:1

Note 1: Refer to the power derating curve for details.

Note 2: Forced-air cooling is required for high-power operation. Ensure the fan is operating before applying RF power.

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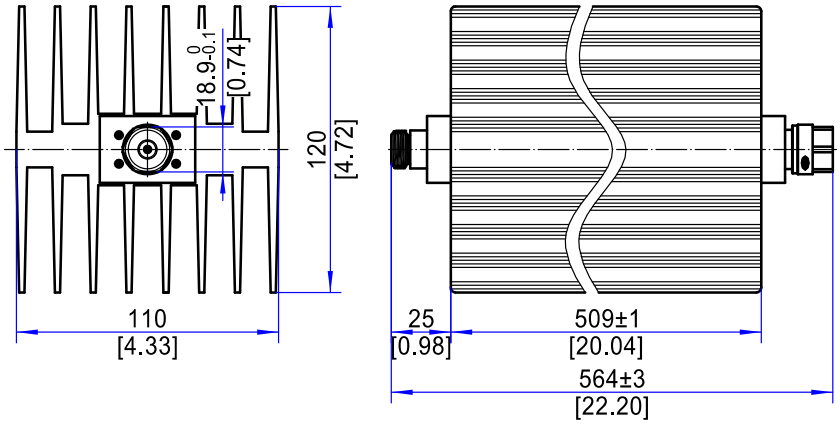
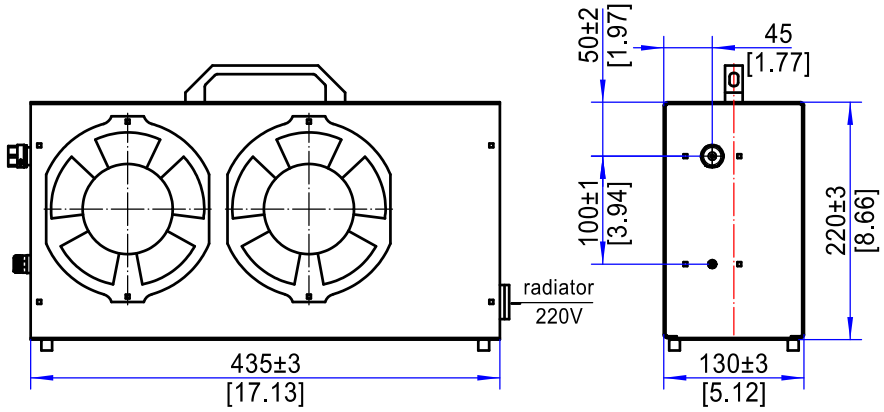
Outline Drawing (Units: mm/[inch], Tolerance: ± 0.5 mm)



Outline A: Without Fan



Outline B: With Fan

Ordering Information:

Model: **YSFA500-XX-YY-N-F**
XX = Frequency Range (4 GHz, 8 GHz, 12.4 GHz, 18 GHz)
YY = Attenuation Value in dB
F = Fan Option (F: With Fan→Outline B)
Example:

- 18 GHz, 10dB, With Fan→**YSFA500-18-10-N-F**
- 18 GHz, 10dB, Without Fan→**YSFA500-18-10-N**