

# Inverter AE48-2000

## Description

The 2 KVA inverter has been meticulously designed for telecom applications. It adeptly converts 48V DC power into a 230V AC output, facilitating the operation of AC-powered telecom equipment.

Its design is well-suited for operation in both indoor and outdoor environments, adhering to the standard 19" rack-mount configuration specified by telecom standards for outdoor use.

The inverter is designed with a 19" shelf-mount solution for effective space management.



## Key Features

Energy Saving – Utilizes innovative technology to maximize efficiency.

Optimal Functionality – Performs effectively across a wide range of temperatures.

## Applications

This inverter is designed to effectively supply power to telecom loads at both indoor and outdoor telecom cell sites, Including –

- Network base stations.
- Small cell sites

## Technical Specifications

1.1 DC Input	
Operating Range	42V <sub>dc</sub> to 58V <sub>dc</sub>
Rated Input Voltage	53.5 V <sub>dc</sub>
Maximum Input Current	62.5 A
Starting Impulse Current	<45A
Maximum Input Voltage	60 V <sub>dc</sub>
Crest Factor	3
Over Temperature / Short Circuit Protection	Yes

1.2 AC Output	
Output voltage	220 V <sub>ac</sub> (Output Voltage is not Adjustable)
Power reduction of Power Grid	1600W -2000W (176V <sub>ac</sub> - 200V <sub>ac</sub> ) 200W (200V <sub>ac</sub> -265V <sub>ac</sub> )
Stabilizing Accuracy	≤ ±1%
Ripple and noise	≤200mVp-p (bandwidth ≤20MHz)
Standby power	≤5W
Boot Start Up time	<10s
Efficiency	>94% (Peak) @ ACINPUT >92% (Peak) @ DCINPUT

1.3 Operational Environment	
Operating temperature	-20 °C to +75 °C Note: For DC/AC & AC/AC -20°C to +45 °C - It works normally. +45°C to +75°C - line derating to 1200VA/1200W. For AC/DC -20 °C to +45 °C - It works normally. +45°C to +75°C - line derating to 18A derated to 40%
Storage Temperature	-40 °C to +75 °C
Relative Humidity	5% - 95% (No condensation)
Altitude	≤ 4000m (3000m – 4000m the temperature will decrease by 1°C for every 200m)

1.4 DC Output	
Output Voltage	40V <sub>dc</sub> ~ 58V <sub>dc</sub> Rated at 53.5 V <sub>dc</sub>
Linear Power derating	1600W; 176V <sub>ac</sub> ~ 265 V <sub>ac</sub>
Standby power	≤5W
Ripple and noise	≤200mVp-p (bandwidth ≤20MHz)
Output holding time	>10ms



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