

# Vertiv™ NetSure™ IPE Series

R48-2000C



## Benefits

- Rapidly deploy your 5G network with outdoor rectifiers that easily mount directly to a pole or wall
- Power your critical infrastructure in harsh environments with durable IP65-rated modules that operate up to +75 °C
- Keep network operating costs to a minimum by using highly available DC power that operates at 95% efficiency
- Eliminate voltage drops and running massive cables to remote radio heads (RRHs) by placing these compact rectifiers directly on top of the tower
- Avoid disrupting the neighborhood by running your network on silent, convection-cooled DC power

*The high efficiency NetSure™ IPE Series reduces power consumption and lowers operating costs while delivering superior performance and uncompromised reliability.*

## Description

The NetSure IPE series high-efficiency R48-2000C rectifier, is designed for applications with low power requirements, such as small cells and remote radio heads (RRHs). Fanless cooling eliminates maintenance and results in silent operation, enabling deployment in public areas.

The rectifier meets IP65 rating to allow installation in harsh environments. Flexible installation options include pole or wall mounting.

The module can be paralleled (up to 3 units) and will load share while intercommunicating by CAN-bus. The rectifier is equipped with relay alarm outputs. The modules can operate with or without battery back-up banks.

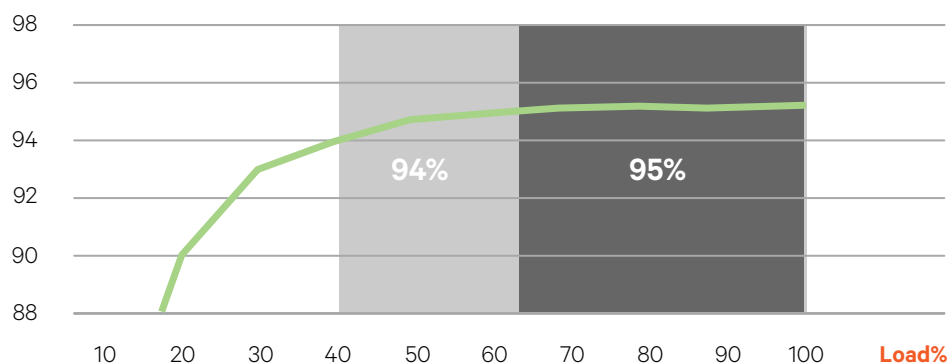


## Application

The NetSure IPE Series is ideal for use in network edge applications including 5G, DAS, and multi-dwelling units (MDUs). Rapid deployment outdoors is easy since the unit is hardened and does not require a separate housing for protection against the elements.



## % Efficiency



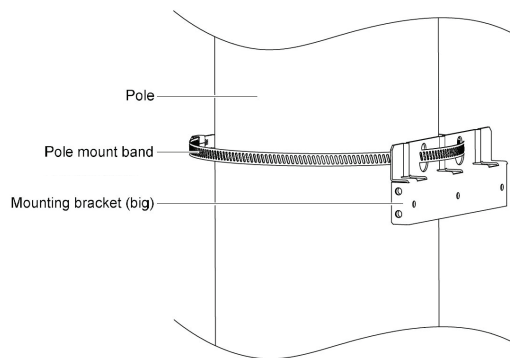
R48-2000C Efficiency Curve at 230 VAC Nominal

## Technical Specifications

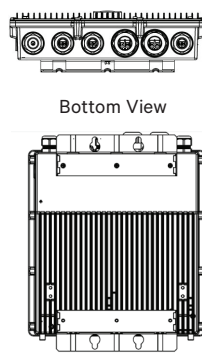
Input	
<b>R48-2000C</b>	
Voltage	85 VAC to 300 VAC (see figure 1), 100-120 VAC and 200-240 VAC (nominal)
Frequency	45 to 65 Hz
Power Factor	>0.90 for 25% to 50% load, >0.98 for 50% to 100%
Output	
Voltage	-54 VDC
Maximum Power	2000 W at 176-264 VAC input, 1500-2000 W (linear derating) at 100-176 VAC input, 1275-1500 W (linear derating) at 85-100 VAC input
Maximum Current	41.6 A @ -48 VDC, limit set point 0 to 41.6 A (see figure 2)
Peak Efficiency	>92% at $\geq 100$ VAC input, >95% at $\geq 230$ VAC input
Environmental	
Operating Temperature	-40 to 75°C / -40 to +167°F (see figure 3)
Storage Temperature	-40 to +70°C / -40 to +158°F
Relative Humidity	5 to 100%
Altitude	-61 to 3048 (m): up to 2000 m at full power / -200 to 10000 (feet): up to 6560 feet at full power
Standards Compliance	
Safety	60950-1, 60950-22 (EN, IEC, UL)
EMC	EN55022, ETSI EN300 386, FCC CFR 47 Part 15 (Class B)
Environment	IP65 60529 (IEC), REACH, RoHS, WEEE, Zone 4
Mechanics	
Dimensions (H x W x D)	471 x 380 x 90 mm / 15.4 x 15.0 x 3.9 inches
Weight	11.0 kg / 24.25 lbs

## Ordering Information

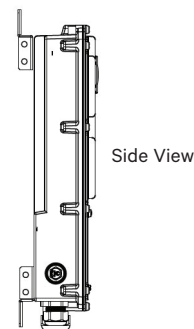
Part Number	Description
02131111	NetSure IPE, -48 VDC, 2000 W, mounting kit included with mounting kit



Mounting Kit



Back View



Side View

## Figures

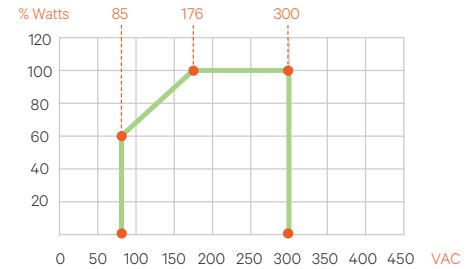


Figure 1: Output Power vs. Input Voltage and  $V_o > 48$  VDC at  $T_{amb} < 50^\circ\text{C}$

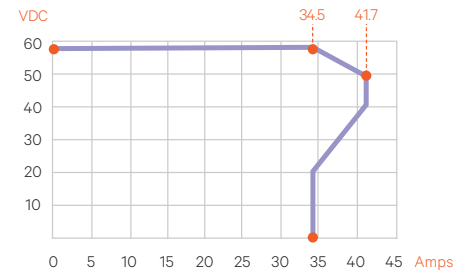


Figure 2: Output Voltage vs. Output Current at Maximum Output Power 2000 W

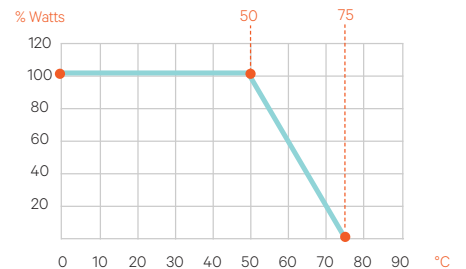


Figure 3: Output Power vs. Temperature at 290 VAC  $\geq V_{in} > 176$  VAC