

Infinity

NE Rectifier NE050AC48

-48Vdc, 50A dc, 208Vac/240Vac

Packing More Power and Efficiency into Small Spaces

The INFINITY NE Switchmode Rectifier NE050AC48 integrates the latest Switchmode technology with superior power density, protection and control features in a compact, cost efficient power conversion system.

Designed as a key element in the revolutionary **Infinity NE** Universal Power Plant, the NE050AC48 rectifier converts ac input voltage into the dc voltage level required to power end user equipment, as well as to float charge batteries at precise voltage levels. Operation over a wide temperature range (-40°C to +75°C) makes the NE050AC48 suitable for controlled and uncontrolled environments.



applications

- Wireless Cell Site Power Systems
- MTSO and Central Office Power Plants
- Dual Voltage Power Plants
- Base Station Power Plants

benefits

- Compact - 1RU form factor providing high power density (23 W/in³)
- Dual Voltage compatibility – the unique connector pin designation allows the converter to be used in a “universal” power shelf, alongside Rectifiers or DC/DC converters with different output voltages.
- Plug and Play – installation of the converter in a shelf connected to a compatible system controller initializes all set up parameters automatically. No adjustments are needed.
- Extended service life – parallel operation with automatic load sharing ensures that parallel units are not unduly stressed even when a unit fails or is removed.
- Monitoring / control – the built in microprocessor controls and monitors all critical converter functions and communicates with the system controller using the built in Galaxy Protocol serial interface.
- Fail safe performance – hot insertion capabilities allow for rectifier replacement without system shutdown; soft start and inrush current protection prevent nuisance tripping of upstream breakers.

key features

- Universal Power shelf compatible
- Hot pluggable
- Optional Fan filter
- Microprocessor controlled
- Digital load sharing
- UL recognized
- 2 – wire digital interface
- Field replaceable fans
- CE marked

specifications

Electrical

Input

Nominal Voltage, single phase	208 Vac / 240 Vac, 2-wire plus ground
Voltage Limit, steady state	175 Vac – 275 Vac (150 Vac – 300 Vac with reduced performance)
Frequency	45 Hz – 66 Hz
Nominal ac Input current	14.5 A at 208 Vac 12.6 A at 240 Vac
Power Factor	>0.98 at >50% rated output
Total Harmonic Distortion	≤5% at full load

Output

Voltage range	-42 Vdc to -58Vdc
Regulation (with controller)	±0.5%
Ripple	100 mV rms
Noise	<2mV psophometric
Output Current	50 A at 54.5 Vdc

Mechanical

Height	1.70" (43.2 mm)
Width	5.23" (132.8 mm)
Depth	13.85" (351.8 mm)
Weight	5.2 lb (2.4 kg)

Environmental

Efficiency	>92% at full output
Operating Temperature Range	-40°C to 75°C
Operating Relative Humidity	0 - 95% (non-condensing)
Storage Temperature Range	-40°C to 85°C
EMC	FCC, EN 55022, CISPR22, Level A, conducted and radiated
ESD	IEC/EN 61000-2, level 4

Safety/Standards Compliance

Safety Standards	UL1950, EN60950 (IEC950), CSA*234/950
Certification Marks	UL Recognized (Canada and U.S.), CE marking

Control and Monitoring

Visual Indicators	Norm, ACF and Fail LEDs
Serial Interface	2 wire RS485 with GP Protocol

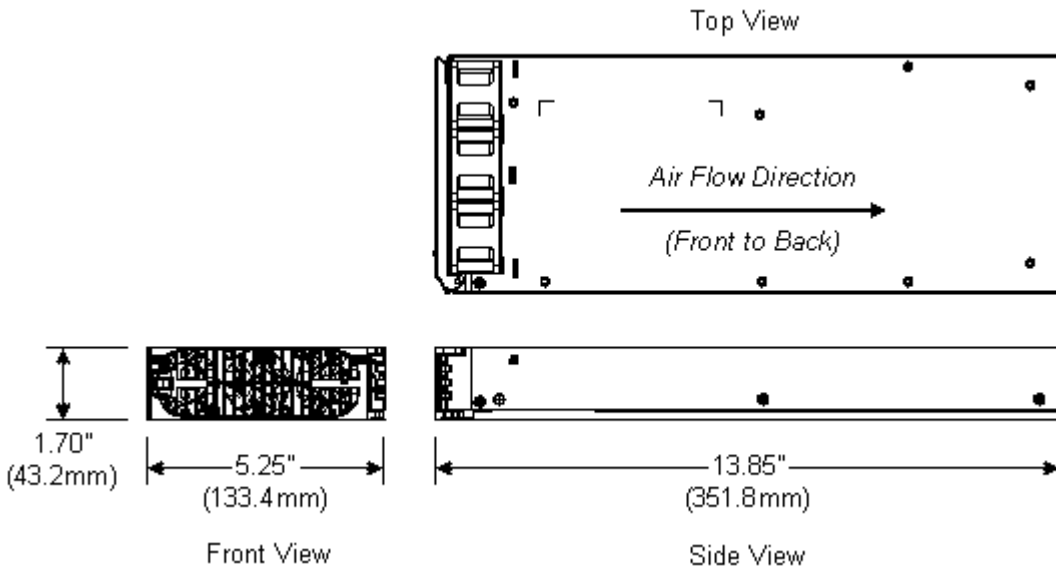
*CSA is a registered trademark of Canadian Standards Association

† VDE is a trademark of Verband Deutscher Elektrotechniker e.V.

UL is a registered trademark of Underwriters Laboratories, Inc.

This product is intended for integration into end user equipment. All the procedures for CE marking of end user equipment should be followed.

Outline Drawing



Power module	Input	Output	Density	Comcode
NE050AC48 Switchmode Rectifier	208/240 Vac	-48 Vdc, 50 Adc	23 W/in ³	CC109124913

Related Product Literature	Drawing number
Ordering Guide, Infinity NE-M Power Plant, +24 Vdc / -48Vdc	H569-2448
Ordering Guide, Infinity-D +24V or -48V Plant	H2007001

With our wide range of product offerings along with extensive application notes, development tools, pre- and post-sales support including technical support, Lineage Power can provide a total solution to your current and future powering needs.

Lineage Power is the industry's most trusted provider of reliable and innovative power conversion solutions, holding more than 400 power supply patents. A long-standing leader in the telecom industry, Lineage Power leverages an 80-year design history that includes highly regarded companies like Bell Labs, Western Electric, AT&T, Lucent Technologies and most recently, Tyco Electronics. Engineering talent, superior service and energy efficient solutions make Lineage Power the right choice for addressing your power requirements and network challenges.