

# Telecom Inverter Solution



The **Eaton Telecom Inverter** is an innovative dual input inverter solution designed for applications where very high reliability of your AC supply is required. By incorporating a 230Vac input, as well as the 48Vdc input, Eaton has developed a solution that closes the gap between the traditional UPS and conventional inverter solutions.

The innovative architecture allows users to provide clean, regulated and continuous AC power to critical loads with the same n+x reliability as traditional DC power systems. The design of the inverter ensures a seamless transfer between the AC and DC inputs, giving zero transfer time and eliminating the need for a Static Transfer Switch.

Users can select between "Line Mode" and "Battery Mode". In Line Mode, the inverter operates similar to a double conversion UPS, drawing power from the AC mains, and delivering

smoothed and isolated AC power to the load. In "Battery Mode", the inverter draws power from the DC input. When power to the preferred input is interrupted; the Inverters seamlessly switch to the alternative input with no interruption of power to your critical AC loads.

The Eaton Telecom Inverter solutions can be configured with an optional controller module and/or Maintenance Bypass Switch. The monitoring controller gives real-time system status through comprehensive LCD /LED displays, and allows system parameter setting through the keypad panel. The communication interface allows users to monitor and control the system remotely.

An optional Maintenance Bypass Switch lets users manually switch the loads between inverter power and AC mains, allowing for complete shutdown of the inverter system while still maintaining mains power to the loads.

## Features

- Pure sine wave output
- AC and DC inputs
- High efficiency, >94% in line mode
- Up to 28kVA single phase output
- 120% overload capacity @ 30°C
- Modular n+x design
- No single point of failure
- Zero transfer time
- Hot-plug connection of modules
- Optional Maintenance Bypass Switch
- Optional LCD display + keypad with USB/RS232/RS485 interface
- ROHS compliance



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# Brief Technical Specification

## DC Input

Operating Range	48V: 40Vdc ~ 60Vdc
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## AC Input

Voltage Range: (50/60Hz)	185Vac - 265Vac
Transfer Time	zero

## AC Output

Power Output (inverter module)	3500VA / 2800W
Maximum	28kVA / 22.4kW
System Power Output (8 Inverters)	
Wave Form	Pure sine wave
Power Factor	0.8
Nominal Output Voltage (selectable)	208/220/230/240Vac
Output Frequency	50/60Hz
Efficiency	>94% AC Input >91% DC Input
Over Load Protection	1.5*Inom, 10sec max 1.2*Inom, temperature controlled

## Environmental Requirements

Operating Temperature Range	-20°C to 60°C (-4°F to 140°F)
Temperature Range	-20°C to 50 °C (-4°F to 122°F), full performance
Cooling	Fan Cooled

## Certifications

All products comply with international standards.

Safety Europe	EN60950-1 / UL60950-1 CE
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In the interests of continual product improvement all specifications are subject to change without notice.



## Part Numbers

INV-4835E	Eaton, Dual Input Inverter module. 48Vdc input, 230Vac Input, 230Vac output. 3.5kVA
INV-SS-8	Inverter Shelf for 8 x INV-4835E. 8U x 19"
INV-MC-2000	Controller for Dual Input Inverter systems (requires controller shelf)
INV-MCSS-1U	Controller Shelf for Dual Input Inverter systems. 1U x 19"
INV-MBS-125	125A Maintenance Bypass Switch for Dual Input Inverter systems. 3U x 19"