

# Application note



Subject:  
**Ultra-compact power supply design for semiconductors oven equipment**

Industry:  
**Semiconductors**

Product:  
**SPPE Enclosed series**

Customer:  
**OEMs**

## CUSTOMER ISSUE

In electrical-electronic equipment, semiconductors are widespread, making the sector very dynamic and productive. The demand is therefore very high and it is mandatory that these semiconductors have a high operational quality now but also in the future.

It is necessary to provide compact and highly reliable solutions to ensure efficient and high-quality production processes.

The main requirements for power supplies are therefore:

- Compact footprint
- High efficiency
- High degree of reliability during operation
- Flexible installation

## OUR SOLUTION

The SPPE power supply series is extremely compact thus facilitating installation in tight spaces. The 200 W models are only 122.5 mm high, 97 mm wide, and 30 mm deep.

SPPE models also ensure high operational efficiency of up to 91.5% and the built-in protection functions as output short circuit, over-current, over-voltage, and over-temperature ensure a high degree of reliability during operations.

The SPPE series features a universal input range with AC or DC voltage, and a wide operating temperature range (-40°C to +85°C / -40°F to 185°F) with derating starting from 50°C (122°F) for most models.

## BENEFITS

- Occupies less panel space
- Wide selection of power outputs (from 25 to 350 W)
- 7 power ranges, 6 housings
- Wide selection of voltage outputs (12/24 Vdc)
- Operates with different AC/DC supply voltages
- Short Circuit, Over Current, Over Voltage, Over Temperature output protections (from 150 W)
- Green LED for status indication
- Voltage output adjustment
- Efficiency up to 91.5%
- Isolation voltage up to 4KVAC
- Overvoltage category III
- Wide operating temperature range (-40°C to +85°C / -40°F to 185°F)
- Derating starting from 50°C
- CE, UKCA, UL 62368 approved