

# 650 V GaN in Broad Industrial Power Systems



TDK-Lambda's new 504 W AC to DC PFH500F-28 is the company's first product in its new PFH power module series and its first GaN-based solution. The module is designed for use in harsh environment applications, which require a high quality, high reliability power system with the maximum power output possible. Transphorm's GaN FETs were selected to meet those objectives.

TDK-Lambda's redesigned standard power module uses a bridgeless totem-pole power factor correction topology to optimize Transphorm's TPH3206LDG FET in an 8x8 PQFN package. And, when compared to the preceding PFE power module series, the PFH500F-28 offers several Transphorm GaN-driven advantages.

## The PFH500F-28 Power Module



Transphorm GaN benefits:

- Ruggedized for harsh environments
- 5% efficiency increase
- 30% power density increases (100 W/in<sup>3</sup>)
- 38% reduction in thermals