

# Transphorm GaN in common redundant power supplies.



High-voltage GaN benefits realized in a standard PFC continuous-conduction mode boost converter.

Different topologies yield different results for GaN-based power systems. A Bridgeless Totem-pole PFC design will optimize Transphorm's GaN, yielding the highest end-to-end benefits including increased efficiency, increased power density, and lower overall system cost. Yet, using GaN in alternate topologies will still produce notable results that enable end product innovation.

Original design manufacturer Delta Electronics uses Transphorm's Gen II GaN FETs to deliver advanced power management capabilities to data center equipment manufacturers. Deploying Transphorm's devices in a standard CCM PFC boost converter design allows Delta to produce an 800 Watt power supply unit with the following benefits:

- 25% circuit size reduction
- 54% switching frequency increase
- Li-ion backup battery integration
- 80 PLUS® Platinum efficiency rating
- Standard 1U (CRPS) form factor

