Ag7100
Single output isolated DC-DC boost converter module

- Wide input supply
  11V - 27V DC
- Maximum power 40W
- Adjustable output
  From 48V – 57V DC
- Small footprint
  51mm(L) x 30mm(W) x16mm(H)
- 1.5kV isolation
- Over current, thermal & short circuit protection
- High efficiency
- Low noise and output ripple
- Simple integration

The Ag7100 module is a low noise DC-DC boost converter designed to generate the higher voltages required for IEEE802.3 PSE applications from lower voltage supplies. These modules provide exceptional efficiency (>90%) while providing full compatibility with the IEEE 802.3af and 802.3at power and isolation requirements.

The module accepts a wide DC voltage input range, from 11V to 27V, providing added versatility. These input voltages are then boosted to generate the higher voltages required to power SilverTel’s PSE modules or compatible PSE circuits. The Ag7100 provides a regulated low ripple adjustable output, of between 48V and 58V. This provides compatibility with both IEEE802.3af and the higher power POE+ 802.3at PSE standards.

The module uses a transformer to provide the necessary 1.5kV isolation between the input and output connections to meet the requisite PoE safety and isolation requirements.

Ag7100 has been designed to provide an ideal solution for powering the SilverTel Ag6100 from a vehicle battery, 12V plug-top PSU or other commonly available power supplies. Its low cost, small footprint, high efficiency and in-built isolation make it an extremely versatile DC-DC boost converter for a wide range of potential applications.