

Ag7200

V1.1
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Single output isolated 20W DC-DC boost converter module



- **Wide input supply**
5V - 15V DC
- **Maximum peak output power 20W**
- **36V to 57V Output**
- **Industrial Temperature to +85°C**
- **Small footprint**
56mm(L) x 18mm(W) x 14mm(H)
- **1.5kV DC impulse isolation**
- **Over current, thermal & short circuit protection**
- **High efficiency (>90%)**
- **Low noise and output ripple**
- **Simple integration**

The Ag7200 module is a low noise DC-DC boost converter designed to generate the voltages required wherever an isolated 48V supply needs to be provided from a lower voltage e.g. for IEEE802.3 PSE, telecom or automotive applications. These modules provide exceptional efficiency (>90%) while providing full compatibility with the IEEE 802.3af power and isolation requirements and all in a low cost, compact footprint package. With minimal extra components needed, circuit design is straightforward.

The module accepts a wide DC voltage input range from 4.5V to 15.5V, providing added versatility. The input voltage is then boosted to generate the higher

voltage required, for example, powering Silvertel's Ag6100 or other compatible PSE circuits. Continuous power of up to 17W can be supplied, with a peak power capability of up to 20W. Ag7200 provides a regulated low ripple adjustable output, through the simple addition of a programming resistor, from 36V right up to 57V.

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

Ag7200 has been designed to provide an ideal and easy to integrate solution for powering the Silvertel Ag6100 in POE 802.3af applications from a 5V on board supply, vehicle battery, 12V plug-top PSU or other commonly available power source. Its low cost, wide input voltage range, very small footprint, high efficiency wide operating temperature range and in-built isolation make it an extremely versatile DC-DC boost converter for a wide range of potential applications.

