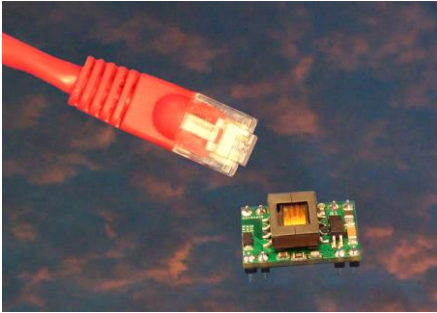


Ag9900-LP

V1.0
June 2018

Ultra-miniature module for the Powered Device (PD)



- **Miniaturised POE PD module:**
-21mm(L) x 14mm(W) x 8 mm(H)
- **Smallest PoE solution in the world**
- **Ag9900 footprint but lower profile**
- **Fully IEEE802.3af PoE compliant**
- **Overload & short-circuit protection**
- **Power: 9W/12V, 7W/5V or 5W/3.3V**
- **1500V isolation**
- **Integral DC/DC converter**
- **Low cost & simple integration**

The Ag9900 series modules pushed the boundaries of POE miniaturisation further than ever before, yet still offer all the features expected from Silvertel's POE. The Ag9900 is the smallest package size available and the "LP" variant offers a low profile module that is only 8mm tall to match the new low profile RJ45 connectors. The module is designed to extract power from a Cat5 cable, fully conforming to the 802.3af Power-over-Ethernet (PoE) standard and includes 1.5kV isolation, PoE signature and an integral DC to DC converter. The module provides a Class 0 signature.

Ag9900-LP offers a simple, ultra-small PoE solution using minimal external low cost components. External bridge rectifiers enable the device to be powered from mid-

or end-span PSE, accepting power from either the spare or data pairs of the cable.

The Ag9900-LP provides signature and control circuitry to provide full PoE compatibility. This signature is required by the Power Sourcing Equipment (PSE) before it will provide power to the port. The module integrated DC/DC converter operates over a wide input voltage range with high efficiency (up to 87%). Built-in protection against overloads and short-circuits is also provided. The regulated DC output voltage is easily adjusted using a simple pull up/down resistor.

The over temperature protection reduces the output power if the maximum operating temperature is exceeded. Normal operation resumes when the temperature drops back below the threshold.

Silvertel's Ag9900-LP is ideally suited as a cost effective solution for PoE for any application, but particularly for very small devices and space limited designs such as IOT, WAPs, sensors, access control and small IP cameras.

