Ag9900
Ultra-miniature module for the Powered Device (PD)

• Miniaturised POE PD module: SMT-21mm(L)x 14mm(W)x13.35mm(H)
• Smallest in the world
• 40% smaller than any other PoE solution
• Fully IEEE802.3af compliant POE
• Overload & short-circuit protection
• Industrial temperature option
• Power: 12W/12V, 9W/5V or 6W/3.3V
• 1500V isolation
• Integral DC/DC converter
• Low cost & simple integration

The Ag9900 series PD modules pushes the boundaries of POE miniaturisation further than ever before, yet still offers all the features expected from Silvertel’s POE. This is the smallest package size available that 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 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. An integrated optimised 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 Ag9900M provides signature and control circuitry to give full PoE compatibility. A signature is required by the Power Sourcing Equipment (PSE) before it will provide power to the port.

The industrial temperature Ag9900MT variant provides over temperature protection. This option 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 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 IP phones, WAPs, sensors and access control panels.