

### HS100 MuxCapacitor® Plus Forward Converter Chip Set

The Helix Semiconductors HS100 Mux-Capacitor Plus Forward Converter two-chip set solution offers the highest energy efficiency for a 10W AC-DC isolated power supply. A multi-gain MuxCapacitor delivers the optimum voltage to a forward converter. The forward converter employs an advanced pulse skipping algorithm to maximize no-load and standby operation power efficiency.

The HP100 two chip set includes reset, internal references and regulation & gain control logic. The chip set's high efficiency reduces thermal loading for lower packaging costs. Other output voltages are available with a simple gain trim.

### Features

- 85-264VAC Input Voltage
- High Voltage MuxCapacitor
- Soft-Start
- 5V, 2A Output Voltage @ 120VAC
- 5V, 1A Output Voltage @ 240VAC
- $\pm 5\%$  Output Voltage Regulation
- $> 95\%$  Efficiency @ 2A
- $> 92\%$  Efficiency @ 200mA
- 10mW No-Load Power Consumption

### Applications

- Smart Outlets
- IoT and IIoT Gateways
- Remote Sensors
- Smoke and CO Detectors

### HS100 Block Diagram





