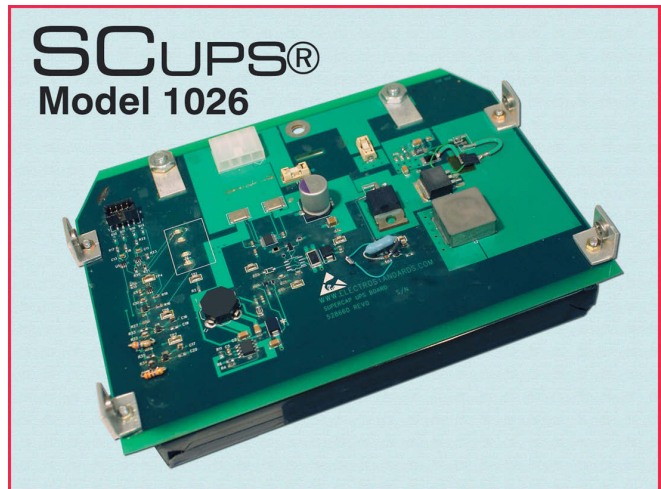


SCUPS® Model 1026 Super Capacitor Uninterruptible Power Supply

The **SCUPS®** Model 1026 Super Capacitor Uninterruptible Power Supply is designed to provide backup DC power to a nominal 12VDC system in the event that the primary power supply is interrupted. Loss of the primary power supply is automatically detected and DC power is then supplied from the SCUPS®. Once the primary power is restored, it is routed to the load and used to recharge the super capacitor in the SCUPS®. The use of the super capacitor for energy storage provides a very low maintenance solution with extremely high cycle life and without the shelf life concerns of typical battery backup systems. The SCUPS® is perfect for low power remote systems where primary power can be interrupted. Typical applications include remote locations with intermittent grid power or renewable energy systems such as solar powered systems. The SCUPS® Model 1026 is easily integrated into user equipment or can be supplied in a standalone package.



Specifications:

Max Power to Load:

12W, 12 VDC at 1A

Max Primary Load Voltage:

15 VDC

Voltage during Hold Up:

11.6 VDC

Hold Up Time:

14 minutes with 1A Load
29 minutes with 0.5A Load

Full Recharge Time:

101 minutes from full discharge to full charge

Min. Recharge Time:

41 minutes from full discharge (nominal times at 22°C)

Energy Storage:

Lithium Ion Super Capacitor

Status Signals:

Digital: 2-State of Charge, Primary-ON, Backup-ON

Temperature:

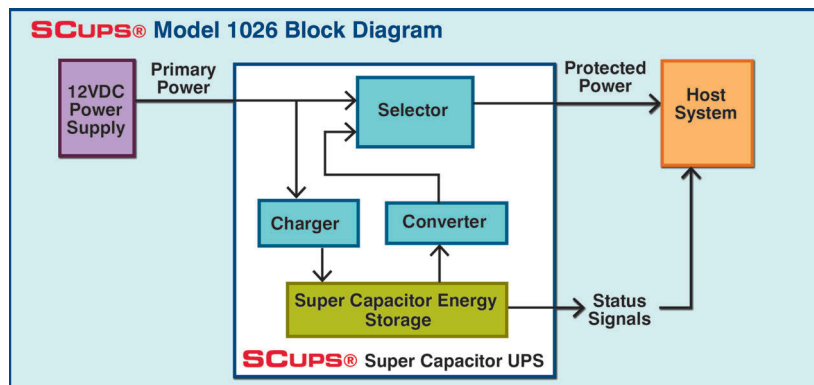
-25°C to 65°C

Dimensions:

6.5" x 4.75" x 1.125" (includes super capacitor)

Weight:

16.3 oz (includes super capacitor)





Detailed User Manual Included with SCUPS® Model 1027 and Model 1026

Table of Contents

- 1.0 Introduction
 - Figure 1: Block diagram of ESL Super Capacitor-based UPS unit.
- 2.0 Caution
- 3.0 UPS Integration Wiring Diagram
 - Figure 2: UPS integration wiring diagram.
- 4.0 Power Connector
- 5.0 Activating the UPS
- 6.0 Deactivating the UPS
- 7.0 UPS System Operations
 - Figure 3: Super capacitor state of charge during UPS system discharge/charge cycle.
 - Figure 4: Voltage applied to the load during a primary voltage supply fault event.
- 8.0 Adjusting UPS Output Voltage Level
- 9.0 Hardware Specifications
- 10.0 Performance Specifications
- 10.1 UPS Discharge Characteristics
 - Figure 5: ESL UPS Energy Discharge Operating Envelope for Current System Release.
 - Figure 6: UPS system discharge time and state of discharge with 500 mA load for different load voltages.
 - Figure 7: UPS system discharge time and state of discharge with 1000 mA load for different load voltages.
- 10.2 UPS Charge Characteristics
 - Figure 8: Charge versus state of charge.
- 11.0 UPS Circuit Board Description
- 11.1 Digital Signal Pin Out
- 11.2 Digital Output Component Specifications
- 11.3 Specifications
- 12.0 Important Notices
 - 12.1 Agreement Not to Analyze or Reverse Engineer
 - 12.2 SAFETY INFORMATION: Advisement to Read and Understand Lithium Ion Capacitor Operational Manual Covering Safety Issues
 - 12.3 Limit of Liability

