

# SuiteLITE (SCLU) – Single Control Lighting Unit

## DC Lighting Power Supply for MRI Suites

### General Specifications

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#### 1.0 **General**

This specification defines the electrical and mechanical characteristics of the SuiteLITE DC power supply for MRI lighting systems. The system as specified herein includes all the components required to meet the power requirements of RF shielded MRI rooms. The SuiteLITE is a single phase, solid state DC power supply with an all copper isolation transformer. The Direct Current (DC) output of the SuiteLITE has very low AC RMS ripple and assures precision hospital grade performance without interference resulting from radiated and/or conducted radio frequency interference (RFI). A closed loop phase control system is employed to assure regulated DC output voltage to keep the proper illumination level while maximizing bulb life.

#### 2.0 **Standards**

The SuiteLITE is designed in accordance with applicable portions of the following standards:

- 2.1 American National Standards Institute (ANSI)
- 2.2 Institute of Electrical and Electronic Engineers (IEEE)
- 2.3 National Electric Code (NEC)
- 2.4 Listed to Underwriters Laboratories (UL) 1012

#### 3.0 **Manufactured Units**

##### 3.1 Input Specifications

- 3.1.1 Nominal AC input voltage rating: 120 volts, +/- 5%.
- 3.1.2 Nominal operating frequency: 60 hertz, +/- 3 hertz.

##### 3.2 Output Specifications

- 3.2.1 Nominal DC output voltage: 120 volts, +/-2%, at 100% dimmer setting.
- 3.2.2 Output AC R.M.S. ripple: No greater than 5%.

##### 3.3 Performance Specifications

Output Voltage Regulation: +/-2% of the set DC output voltage through the input voltage range of  $\pm 5\%$ , no load to full load.

### 3.4 Line and Load Protection (Standard)

- 3.4.1 Molded case, thermal magnetic main input circuit breaker, rated at above 125% of the full continuous load input current, is furnished as an integral part of the unit.
- 3.4.2 The positive load terminal is properly fused. The fuse is of a common fuse type located within the SuiteLITE. The negative load terminal is grounded.

### 3.5 Controls

The SuiteLITE is controlled by a standard, commercially available, 600 watt incandescent duty, AC dimmer control station with on/off switch. The dimmer control station is included with the system.

### 3.6 Enclosure

- 3.6.1 The enclosure is a wall mount type, ventilated, all steel construction built to NEMA 1 standards. The metal is pre-treated with a phosphate coating and finished with a powder coated paint finish to resist marring or scratching. Access to the internal components is available through a hinged door which requires a common hand tool to open.
- 3.6.2 Cooling: Convection, assuring maximum reliability and minimum maintenance.
- 3.6.3 The dimensions of the enclosure are: 24"W x 20"H x 11"D, and the enclosure is a one piece package.

### 3.7 Power Requirements

- 3.7.1 SuiteLITE available DC output ratings: 600, 1200, 2000 or 3000 watts.
- 3.7.2 Model Numbers: SCLU-600S, SCLU-1200S, SCLU-2000S, and SCLU-3000S.
- 3.7.3 Model Numbers with optional "In Suite" DC dimmer control: SCLU-600SP, SCLU-1200SP, SCLU-2000SP, and SCLU-3000SP.

### 3.8 Indicator Light

- 3.8.1 The SuiteLITE features an indicator light which illuminates when the system is on.
- 3.8.2 The SuiteLITE features a dimmer control station indicator light which illuminates when the switch is off.

## 4.0 Warranty

Systems are to be free from defects in material and workmanship for a period of 1 year following shipment from the factory.

## 5.0 Options

In place of the standard 600W commercial AC dimmer control station, an optional low voltage DC dimmer control station is available to be installed within the MRI suite for the control of the DC lighting fixtures.