

SCC Series, Constant Current Emitter Reference Board



SCC-C50-2ULMS5 Dual Emitter Constant Current Emitter Reference Board

The Silanna SCC Series Constant Current Board is a plug-and-play reference solution to efficiently operate Silanna’s UVC-LED at 20mA or 100mA operating current. It features a metal core PCB for low thermal resistance between the UV-LED and the heatsink.

Applications:

- Chemical and biological analysis
- Water quality monitoring
- Gas sensing
- Liquid chromatography

Features:

- User selectable UV-LED drive current of 20mA & 100mA.
- Dimming circuit using on-board trim-pot to vary the duty cycle of Pulse Width Modulation (PWM).
- On-board NTC thermistor to measure LED solder point temperature (T_s).
- Visible Red LED for optical alignment.
- Adaptable to 30mm optical cage system for secondary optical setup.
- Customisable LED drive current
- Input polarity protection.
- Optimised for thermal performance of UV-LED.
- Compact 50mm board including all components inside a 30mm diameter.
- Dual Emitter Constant Current Reference Board has an optional secondary LED that can be paired with Silanna’s UVC-LED. (e.g., 255nm+350nm or 235nm+275nm)

How to order:

Please contact sales at Sales_UV@silanna.com to discuss the different variants available that would suit your application.

Silanna PN	Product Description
SCC-C50-1ULMS2	Single Emitter Constant Current Reference Board
SCC-C50-2ULMS5	Dual Emitter Constant Current Reference Board

Board Specification

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating temperature range	T_A	0	25	55	°C
Forward current (20mA at 25°C)	I_F	18	-	20	mA
Forward current (100mA at 25°C)	I_F	95	-	100	mA
I_F stability over a fixed temperature	$(I_{Fset} - I_F) / I_{Fset}$	-	3	5	%
Board supply voltage	V_{in}	$V_F + 3.5$	12	22	V
I_F vs Temperature	$(\Delta I_{OUT} / I_{OUT}) / ^\circ C$	-	-0.2	-	%/°C

V_F – LED Forward Voltage