

# **Calibrated Reference Cell**

**Models:**

**SC-LT and SCI-REF-Q**

**Documentation**

**V 1.1**

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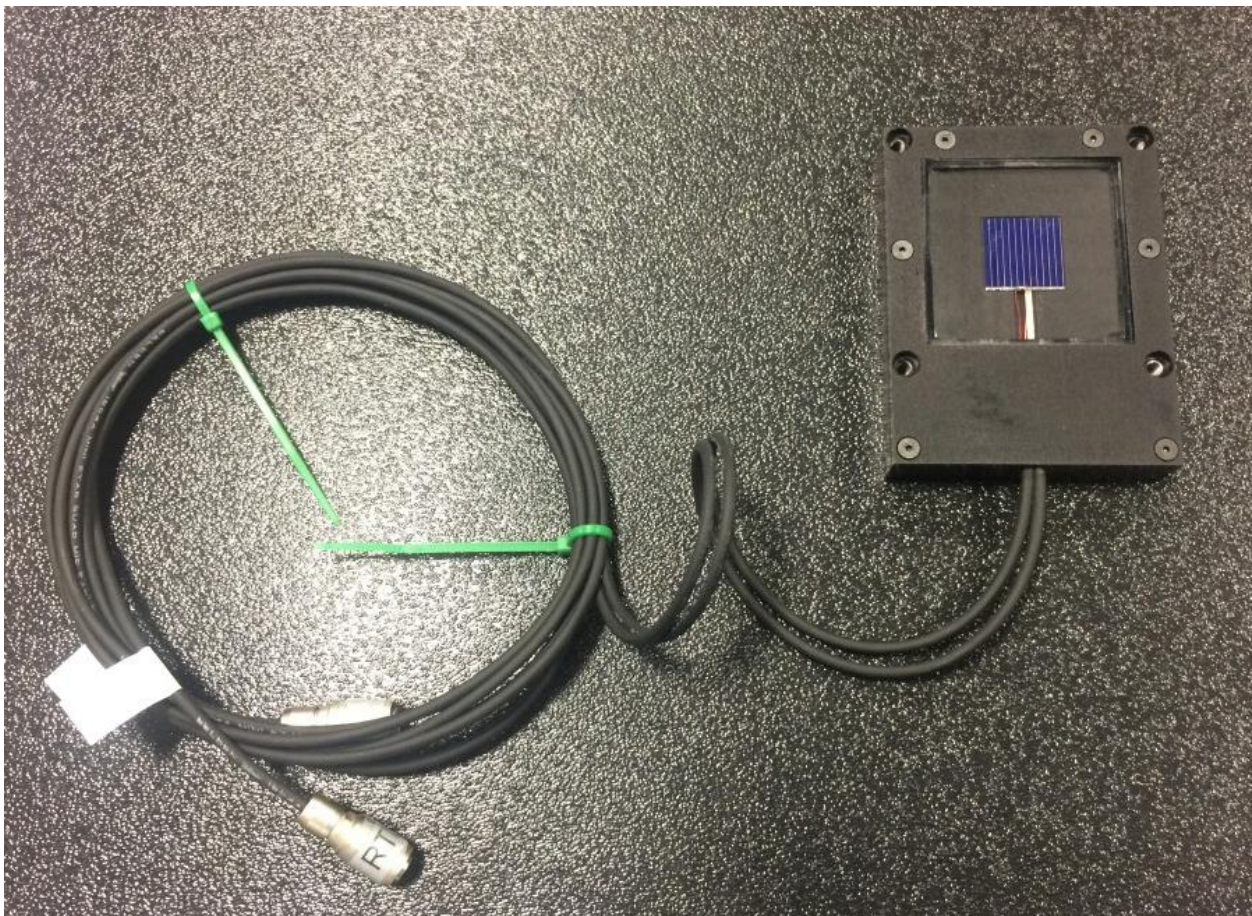
# 1. Overview

The SC-LT and SCI-REF-Q reference cells are industry standard form factor calibrated solar reference cells. The SC-LT reference cells come with an ISO/IEC 17025 accredited certificate of calibration and is traceable to NIST or NREL. The SCI-REF-Q reference cell comes with a Sciencetech certificate of calibration. Both models of reference cell are calibrated following the procedures described in ASTM E948 and E1021 standards.

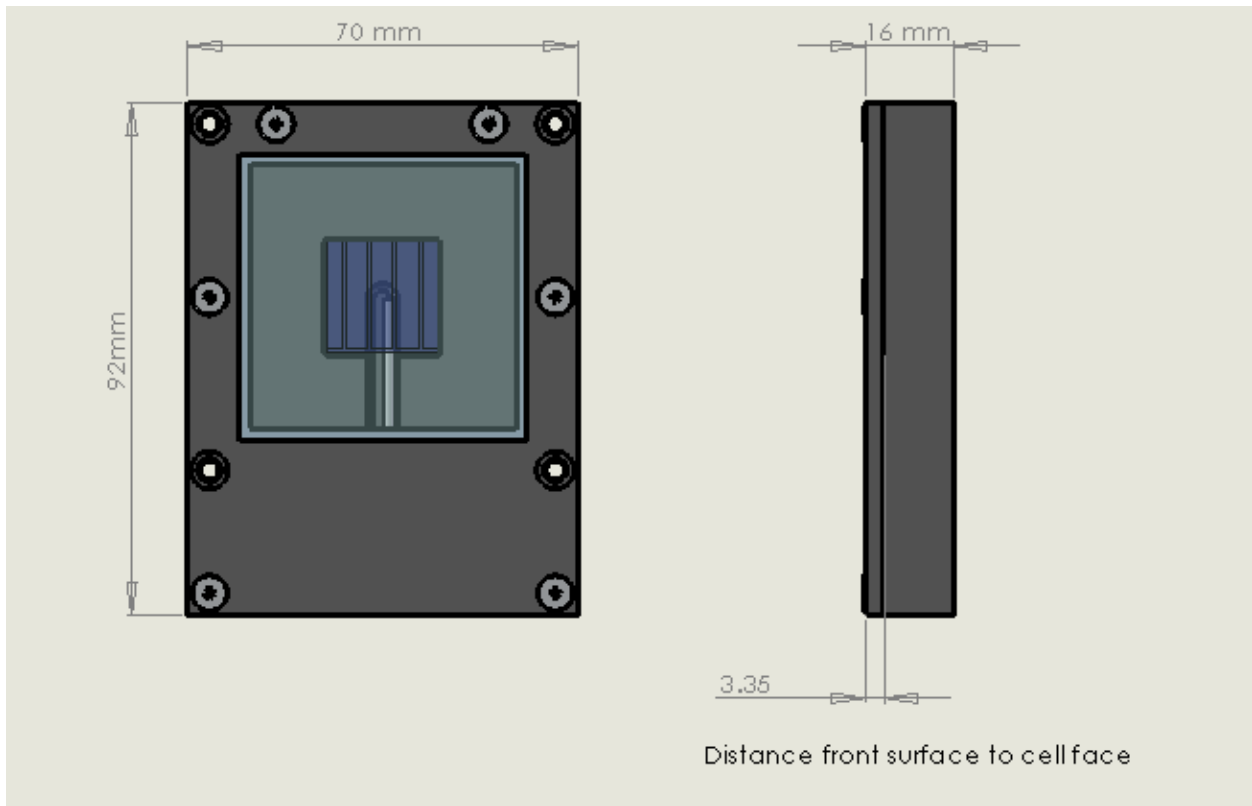
Each Solar Reference Cell consists of a 20 x 20 mm monocrystalline silicon Photovoltaic Cell encased in a 92 x 70 x 16 mm metal enclosure with a protective quartz window and a PT100 RTD temperature sensor.

The Solar Reference Cells include a compatible set of connecting cables and terminating connectors.

- For IV connection a 4 pin cable with banana connectors is included (125-7004)
- For RTD connection a 4 pin male connector, (486-0294, HiRose HR10-7R-4P)



## 2. Dimensions



### 3. Electrical Configuration

Cell IV	20x20mm PV Cell		Connections	Terminating Connection
	Wire - Belden 1804a	Pin	HR10-7P-4P	HR10-7R-4S
	white	1	back of cell +	
	white w/stripe	2	back of cell +	
	blue	4	front of cell -	
	blue w/stripe	3	front of cell -	
RTD	IPT100KN2515CLA - Omega		Connections	
	Wire - Belden 1804a	Pin	HR10-7P-4S	HR10-7R-4P
	white	1	RTD +	
	white w/stripe	2	RTD +	
	blue	4	RTD -	
	blue w/stripe	3	RTD -	

