



## Apogee Instruments SP-230 Silicon-cell Pyranometer Google's Project Loon

Apogee Instruments' SP-230 heated pyranometer was recently selected to be part of Project Loon from Google. Project Loon is a network of high-altitude balloons developed by the Google X team that will provide streaming internet coverage from the stratosphere down to many rural and remote areas around the world. Apogee's SP-230 pyranometer is installed on each balloon to monitor the performance of the PV panels that provide the renewable power for the electronics. The SP-230 is uniquely suited for the job because the internal heater draws only 15.4 mA at 12 V DC, yet keeps the optics clear in the icy, cold conditions of the stratosphere.

The project began with four of our sensors being purchased for testing and development in 2013 and has grown to include hundreds of SP-230s that have been delivered for deployment around the globe. Apogee Instruments is proud to be a partner in a project that will help build a truly global community.



### Application Summary

#### Summary

Apogee's SP-230 heated pyranometer was selected to monitor PV panels on Project Loon.

#### Apogee Sensors Used

SP-230 Silicon-cell Pyranometer

#### Contributing Organizations

Google X Team

#### Location

Global

#### SP-230 Heated Silicon-cell Pyranometers

