Philtec

APPLICATION NOTE

8 July 2012

SENSORS FOR HOT TARGETS >600°C

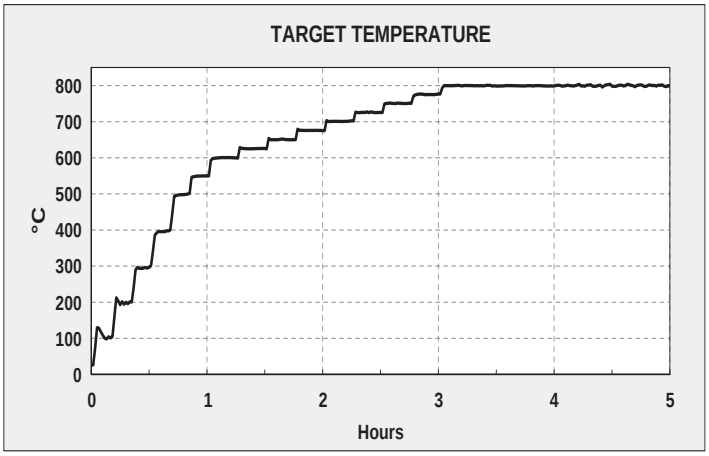
BLUE WAVELENGTH TECHNOLOGY

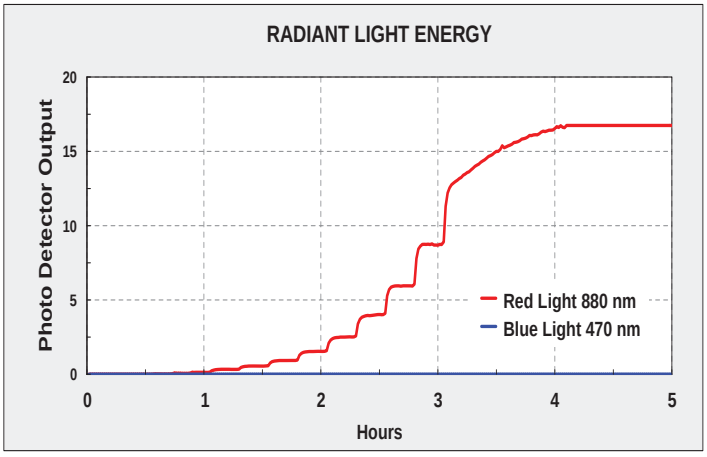
Philtec introduces:

Blue Light Sensors for displacement measurements on extremely hot targets.

Metals emit light energy in the red wavelength spectrum when heated above 600°C as shown in the charts below. The radiant energy from red-glowing parts interferes with diplacement measurements of conventional optical sensors that use red lasers or LEDs as the light source.

Tests run by Philtec engineers demonstrate there is virtually no detectable light energy from hot targets in the blue wavelength spectrum.





MATERIAL TECHNOLOGY

Sensor probes and tips exposed to temperatures >600°C are constructed with exotic materials that can withstand extreme temperatures such as:

- fused silica (quartz) fibers
- ceramic adhesives
- high temperature alloys

APPLICATIONS

- gas turbines
- glass forming ovens
- glowing metals and ceramics
- hot steel processing

CONTACT US

The combination of blue wavelength and exotic material technologies allow displacement measurements to be made in extremely high temperature applications. For more information and design guidance please call us at 410-757-4404 or email: sales@philtec.com