

# NEW ISO 9060 STANDARD PLANNED FOR SEPTEMBER 2018, WHAT WILL CHANGE ?

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**After 28 years, a new standard ISO 9060 (Solar energy -- Specification and classification of instruments for measuring hemispherical solar and direct solar radiation) is under development to account for the latest market and technology status. As the market leader in solar radiation, Kipp & Zonen has been actively involved in drafting the new standard.**

The draft is ready, and waiting for approval. If all goes well the new ISO 9060 will be published in September 2018. We would like to share the expected changes and how they impact your business. As your trusted supplier we can confirm that Kipp & Zonen is ready and will be fully compliant to the new ISO 9060 standard.



## The main intended changes in ISO 9060

- Instruments like SP Lite, rotating shadow bands and other irradiance instruments, that currently do not have a class, can be classified with the new ISO 9060
- The classifications "secondary standard", "first class" and "second class" are well accepted by users, but the nomenclature as such is confusing for newcomers. That's why the new instrument classes are "A", "B", "C".
- Per class A,B,C, there is an addition: either "spectrally flat" or "fast response".
- The term "spectrally flat" is introduced to make clear that an instrument is provided with a black absorber (with or without diffusor) that does not need post processing of data to achieve good results under different sky conditions. Excluded from the spectrally flat group, are instruments like rotating shadow bands or photo diode based instruments with a limited spectral range that use or need corrections with airmass or cloud coverage.
- For class A pyranometers (for Kipp & Zonen instruments: CMP and SMP models 10 and higher) there is a new requirement for individual testing and reporting of temperature response and directional response.

## Implications ISO 9060

All newly Kipp & Zonen manufactured pyranometers CMP/SMP, models 10 and higher, will get individual temperature and directional response characterization as soon as the new ISO standard is approved and active. Free of charge. You'll find the certificates included in the product shipments. For this, Kipp & Zonen invested in further automation of the calibration facilities.

There is no need for sending back installed pyranometers to make them backward compliant. At the moment of installation they were compliant, and the pyranometers of Kipp & Zonen are all in very small bands for temperature & directional response;

## Kipp & Zonen innovation on standards & pyranometers

Pre-announcement innovation

It is important to have a good stakeholder dialogue and come up with new standards once in a while. International guidelines aim to describe a perfect situation with technological solutions that are available at the moment of publishing. In parallel, there's innovation; standards can even become outdated before or just after they are even published when an innovation is close to being launched; as a product leader Kipp & Zonen has anticipated on the new requirements, designing new technology that covers the new standards.... and more.

We are working on an exciting breakthrough solution in pyranometers that helps you to be fully compliant with moderate investments to achieve maximum data reliability and uptime. We cannot tell more now, because there are always copycats around and a product leader should come out first to the market. Wait and see... Planned launch: 2019.

Next to the new ISO 9060 standard that will be published soon, there is another industry guideline for solar monitoring in Photovoltaics launched in March 2017: IEC 61724-1-- Photovoltaic system performance - Part 1: Monitoring. In this standard, also a Class A, B and C is used, with a different meaning.