

# New Turn-key Data Acquisition Solutions

Kipp & Zonen offers a wide range of measurement instruments for many different applications. For high quality instruments such as ours the way that measurement data is collected is very important for accuracy and reliability. Therefore, Kipp & Zonen offers a range of read-out devices and data acquisition systems that are compatible with our instruments.



For maximum portability we offer the single channel METEON hand-held read-out device, which also offers simple data logging. Low Power stand-alone data logging is achieved with the weather-proof LOGBOX SD, for applications where data from a single, or small number, of instruments needs to be continuously recorded. For advanced data acquisition solutions we offer the COMBILOG data logger.

For customers requiring complete measurement and data acquisition solutions Kipp & Zonen introduces a new range of data acquisition system configurations based on the COMBILOG.

## Turn-key data acquisition solutions

Because of its excellent performance and ease of use we recommend COMBILOG for our higher quality solar radiation monitoring stations, especially those complying with the requirements of the Baseline Surface Radiation Network (BSRN).

COMBILOG is compatible with the full range of Kipp & Zonen solar radiometers and industry standard meteorological instruments for wind, temperature, pressure, precipitation, etc. It also directly accepts 0 - 20 mA and 4 - 20 mA signals.

COMBILOG systems can be configured with a choice of enclosure, power supply, solar powered back-up power and GSM modem. They have full over-voltage protection for the signal inputs. For large systems two COMBILOGs can be linked together to increase the number of channel available.

## Application example

For example, a SOLYS 2 sun tracker is often equipped with two ventilated pyranometers for global and diffuse measurement, a ventilated pyrgeometer for long-wave infra-red, and a pyrhelimeter for direct radiation. The data from the instruments and the fan speed signal from the CVF 3 ventilation units need to be recorded. In addition the data needs to be collected through remote communication.

We will assume that there is mains power available for the SOLYS 2 and the data logger. A suitable solution in this case consists of a COMBILOG in an IP 65 enclosure complete with over-voltage protection, GSM data modem and mains to 12 V adapter for powering the data logger and the ventilation units. This is just one of the new configurations we can offer, as shown in the table below.

Data acquisition solution	Included in configuration	Options
Compact system, 1x COMBILOG data logger Stainless steel enclosure Weather-proof to IP 65 38 x 38 x 21 cm	Over voltage protection Power terminals Cable glands RS232 and RS485 communication	GSM Modem Mains to 12 V DC power adapter Back-up battery and charger Solar powered back-up battery Data processing and graphical display software
Extended system, 2x COMBILOG data loggers Stainless steel enclosure Weather-proof to IP 65 50 x 50 x 21 cm	DIN-rail mountings Configuration software	

More detailed information on our data acquisition solutions can be found in the new brochure available from our website. Or contact your local Kipp & Zonen distributor ■