

Adjustable Tilt Radiometer Mounting Kit



In solar energy applications it is often desirable to measure the 'tilted' global solar radiation at the angle of non-tracking (fixed) photovoltaic panels, in addition to the usual horizontal global radiation measurement. This can be achieved by mounting a pyranometer at the same angle as the fixed PV panel, so that it sees the same incoming solar radiation.

The Adjustable Tilt Radiometer Mounting Kit is designed to be installed on a horizontal surface and allows a radiometer instrument to be mounted at zenith angles from 0° to 90°.

The mounting has a clear scale graduated in degrees and a secure locking device for easy adjustment.

The kit can also be fitted on the CMF 4 mounting fixture for simple attachment to walls and poles using the CMB 1 mounting bracket.

The Adjustable Tilt Radiometer Mounting Kit can be used with the shading ball assemblies of our 2AP and SOLYS 2 sun trackers to measure tilted diffuse radiation.

Measure tilted global and diffuse solar radiation

The position and angle of fixed photovoltaic panels makes a big difference to the power output and return on investment of a solar energy plant. The best way to determine this in prospecting and performance measurement is by measuring solar radiation with both horizontal AND tilted pyranometers.

Kipp & Zonen offers an accessory to tilt a pyranometer to your preferred angle; the adjustable Tilt Radiometer Mounting Kit.



A horizontally mounted pyranometer measures the global short-wave radiation from the sun and sky in a way that is easily comparable with other sites and with solar energy database information. However, for fixed angle (non-tracking) PV panels it is important to know the energy available within the 'view' of the panel. This 'tilted global radiation' is measured using a pyranometer inclined at the same angle as the panel.

The Adjustable Tilt Radiometer Mounting Kit can be fixed to a horizontal surface and has a clear scale in degrees, and a secure locking device, for easy adjustment of any CMP & SMP series pyranometer between 0° and 90° solar zenith angle. The kit can also be fitted to the CMF 4 mounting fixture for simple attachment to walls and poles using the CMB 1 mounting bracket.

The kit can be fitted to the SOLYS 2 and 2AP sun trackers for all CMP & SMP instruments.

The dome is at the correct height for use with the tracker shading ball assemblies to measure the 'tilted diffuse radiation' seen by a single-axis sun tracking PV panel. The existing Tilted CMP Pyranometer Mounting Kit fits to the side plate of a sun tracker and measures the tilted global radiation as seen by a two-axis sun tracking PV panel.

Please note that these mounting kits cannot be used with the CVF 4 ventilation unit.

