



CVF4 Ventilation Unit

Product #: 0378910
USD Price: Contact Hach

Ventilation of solar radiation instruments improves the reliability and accuracy of the measurement by reducing dome soiling by dust and dirt. With thermopile-based pyranometers and pyrgeometers ventilation stabilizes the temperature of the radiometer and reduces thermal offsets. The integrated heater can be powered to prevent dew formation, disperse precipitation and melt frost, ice or snow on the dome. Using ventilation and heating maximizes the up-time of good quality data and extends the cleaning interval.

CVF4 is a low power, low maintenance ventilation unit. The only part that needs maintenance is the air inlet filter, which should be checked at regular intervals and cleaned or replaced when necessary. No tools are required for this and the unit is supplied with 5 spare filters. There is a 5 V pulse signal so that the fan speed can be monitored.

The air flow that the CVF4 creates is unique; it swirls to improve the distribution over the top of the dome. This has now been further improved using an optimally shaped air duct and a new fan that has higher air flow and is waterproof. The interface electronics have also been redesigned. As a result, the improved CVF4 now comes with a 5-year warranty and it is protected to IP68.

CVF4 is designed to be used with Kipp & Zonen's:

- CMP / SMP pyranometers
- CGR / SGR pyrgeometer
- CUV5 / SUV5, SUV-A, SUV-B and SUV-E ultraviolet radiometers

CVF4 can be mounted on our SOLYS2 and SOLYS Gear Drive sun trackers and the CM121C shadow ring.

Specifications

Compatible Instruments:	C/SMP3, 6, 10, 21, 22; C/SGR4 and C/SUV with reduced performance
IP Rating:	68
Operating Temperature Range:	-20 to +70 °C
Power:	Ventilation: 5 W (continuously) Heating: 5.5 W (when required)

	Heater induced offset: $< 1 \text{ W/m}^2$ (with CMP pyranometers)
Power Supply:	$12 \pm 1 \text{ VDC}$
Zero offset A:	Reduction 50% (with double-dome C/SMP pyranometers)