

Cosine correctors

To collect light from a 180° angle, cosine correctors are used. This eliminates optical interface problems associated with the light collection sampling geometry inherent to other sampling devices such as bare fiber-optics, collimating lenses or integrating spheres.

Avantes offers four different models of cosine correctors: The CC-UV/VIS and CC-VIS/NIR have a 3.9 mm active area, and dimensions of 18 mm (L) X 6.5 mm (OD). The CC-UV/VIS is made of Teflon which is especially suited for measurements in the 200-800 nm range,

whereas the CC-VIS/NIR covers the full UV/VIS/NIR range of 200-2500 nm and is made of Radin Quartz.

The CC-UV/VIS/NIR-8MM works as the CC-VIS/NIR, but has an active area of 8.0 mm and dimensions of 29 mm (L) X 12 mm (OD). The specialized CC-UV/VIS/NIR-5.0 has a 20 mm active area is used for solar measurement applications requiring a 5° angular field of view has a 20 mm active area and is much larger than the other cosine correctors measuring 317 mm (L) X 38 mm (OD).

CC-VIS/NIR



Technical data

	CC-UV/VIS	CC-VIS/NIR	CC-UV/VIS/NIR-8MM	CC-UV/VIS/NIR-5.0
Active area	3.9 mm	3.9 mm	8.0 mm	20.0 mm
Diffusing material	Teflon (200-800 nm), ca. 1 mm thick	Radin Quartz (200-2500 nm), ca. 1.5 mm thick		
Dimensions	6.5 mm diameter, 18 mm long		12 mm diameter, 29 mm long	38 mm diameter, 317 mm long
Sampling geometry	Accepts light at/from 180° FOV			Accepts light at 5° FOV
Connector	SMA-905			
Temperature	-30 °C to +100 °C			

Ordering Information

CC-UV/VIS	• Cosine Corrector for UV/VIS, incl. SMA adapter
CC-VIS/NIR	• Cosine Corrector for UV/VIS/NIR, incl. SMA adapter
CC-UV/VIS/NIR-8MM	• Cosine Corrector for UV/VIS/NIR, 8 mm area, incl. SMA adapter
CC-UV/VIS/NIR-5.0	• Cosine Corrector for UV/VIS/NIR, 5.0° FOV, incl. SMA adapter

A cosine corrector collects light from an angle of 180°, ideal in situations with scattered light