

Macam

SMU203 Spot Measurement Accessory



The Macam SMU203 Spot Measurement Accessory permits reflex viewing of a scene or target, and may be used with Macam 201 and 203 series photometers and radiometers. The spot measurement is achieved by using a tilted mirror (with an aperture at its centre) which is placed at the image plane of the C-Mount optics. This arrangement offers intrinsically high levels of stray light protection and ensures that only light or radiation from the target entering the aperture is measured by the detector.

The standard optics provided are 25 mm focal length lenses with a fixed aperture of F/1.6. This provides a field of view of 22°. The standard mirror uses a 2 mm Dia. aperture giving a spot size of 2.5°. Longer focal length lenses (offering smaller spot sizes) are available.

Focal Length	F No	Field of View	Spot FOV	Spot Size @ 1m
25 mm	1.6	22°	5°	9 cm
50 mm	1.6	11°	2.5°	4.5 cm
75 mm	1.3	7.5°	1.5°	2.5 cm

When the SMU203 is used with the Macam 201 or 203 ranges of hand held radiometers, calibration can be provided permitting the direct measurement of luminance (fL or cd.m^{-2}) and / or radiance ($\text{W.m}^{-2}.\text{sr}^{-1}$). For UV radiance measurements (down to 200 nm) a Quartz C-Mount can be provided, (standard optics transmit from 380 nm to over 1100 nm). Operation is also possible with the SR9000 spectroradiometers and Monolight OSA systems (a ferrule adapter is required).

Accessories include extension tubes (to permit macro operation; useful for display or character measurements), UV and ND filters, and a microscope objective adapter.

The base of the SMU203 is threaded to accept a standard photographic tripod mount (1/4-UNC).

Dimensions (W x L x H) 40 mm x 35 mm x 60 mm