

UM-B

5 nW - 25 mW, radiometer for ultra-low power measurements



KEY FEATURES

- > **VERY LOW NOISE LEVEL**
Noise levels of a photodetector, but with the large bandwidth of a pyroelectric:
 - Down to 5 nW when using the analog power module (APM)
- > **VERY HIGH RESPONSIVITY**
Up to 20 000 V/W when using the analog power module (APM)
- > **VERY LARGE BANDWIDTH**
From DUV to FIR thanks to pyroelectric technology
- > **INCLUDES AN ISOLATING TUBE TO BLOCK UNDESIRABLE NOISE FROM THE ENVIRONMENT.**

OUTPUT OPTIONS

- > **SMART DB15 CONNECTOR**
Contains all the calibration data
Included in UM9B-BL-D0 model only
- > **ANALOG OUTPUT**
When used with APM analog power supply

COMPATIBLE DISPLAYS & PC INTERFACES



MIRO ALTITUDE



MAESTRO



U-LINK



M-LINK



APM analog power supply
(for UM9B-BL-L-D0)

ACCESSORIES



Stand with delrin post



SDC-500 digital
optical chopper



UM-B

Specifications



*Also traceable to NRC-CNRC



	UM9B-BL-L-DO	UM9B-BL-DO
MAX AVERAGE POWER	200 μ W	20 mW (MAESTRO), 25 mW (M-LINK)
EFFECTIVE APERTURE	9 mm ϕ	9 mm ϕ
COMPATIBLE DISPLAYS & PC INTERFACES	APM	MIRO ALTITUDE, MAESTRO, U-LINK and M-LINK
MEASUREMENT CAPABILITY		
Spectral range	0.1-20 μ m	0.1 - 20 μ m
Calibrated spectral range	0.248 - 21 μ m ^a	633 nm ^b
Maximum measurable power	200 μ W	20 mW (MAESTRO), 25 mW (M-LINK)
Noise equivalent power (RMS)	5 nW	300 nW
Rise time (τ -100%)	5 0.25	5 0.25
Calibration uncertainty	\pm 4% at 1064 nm	\pm 4% at 1064 nm
Chopper frequency	5 \pm 1 Hz	10 \pm 1 Hz
DAMAGE THRESHOLDS		
Maximum average power density (1064 nm)	50 mW/cm ²	50 mW/cm ²
PHYSICAL CHARACTERISTICS		
Effective aperture	9 mm ϕ	9 mm ϕ
Sensor	Pyroelectric	Pyroelectric
Absorber	BL	BL
Dimensions	38.1 ϕ X 79D mm	38.1 ϕ X 79D mm
Weight	91g	91g
ORDERING INFORMATION		
Available output options	DB15 only	DB15 only
Compatible stand	STAND-D-233	STAND-D-233
Product page		

a. Calibrations at 2.1 to 2.5 μ m and 10.6 μ m are available on special request.
 b. Typical wavelength correction factors are provided for 0.19 to 21 μ m.

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