

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 (D) analog power supply

COMPATIBLE DISPLAYS & PC INTERFACES



MAESTRO



U-LINK



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

ACCESSORIES



Stand with delrin post



SDC-500 digital
optical chopper



Extra isolation tube



Fiber adaptors & connectors
(FC, ST and SMA)



Pelican carrying case



	UM9B-BL-L-D0	UM9B-BL-D0
MAX AVERAGE POWER	200 μ W	20 mW (MAESTRO), 25 mW (U-LINK)
EFFECTIVE APERTURE	9 mm $\varnothing$	9 mm $\varnothing$
COMPATIBLE DISPLAYS & PC INTERFACES	APM (D)	MAESTRO and U-LINK
MEASUREMENT CAPABILITY		
Spectral range	0.1 - 20 μ m	0.1 - 20 μ m
Calibrated spectral range	633 nm ^b	0.248 - 2.1 μ m ^a
Maximum measurable power	200 μ W	20 mW (MAESTRO), 25 mW (U-LINK)
Noise equivalent power (RMS)	5 nW	300 nW
Rise time (0-100%)	≤ 0.2 s	≤ 0.2 s
Calibration uncertainty	$\pm 4\%$ at 1064 nm	$\pm 4\%$ at 1064 nm
Chopper frequency	5 ± 1 Hz	10 ± 1 Hz
DAMAGE THRESHOLDS		
Maximum average power density (1064 nm)	50 mW/cm ²	50 mW/cm ²
PHYSICAL CHARACTERISTICS		
Effective aperture	9 mm $\varnothing$	9 mm $\varnothing$
Sensor	Pyroelectric	Pyroelectric
Absorber	BL	BL
Dimensions	38.1 $\varnothing$ X 79D mm	38.1 $\varnothing$ X 79D mm
Weight	91 g	91 g
ORDERING INFORMATION		
Available output options	DB15 only	DB15 only
Compatible stand	STAND-D-233 or STAND-D-233-M	STAND-D-233 or STAND-D-233-M
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 2.1 μ m.