

# UM-B

5 nW - 25 mW, Radiometer for Ultra-Low Power Measurements



## KEY FEATURES

- 1. VERY LOW NOISE LEVEL**  
Noise levels of a photo detector, but with the large bandwidth of a pyroelectric:
  - Down to 5 nW when using the Analog Power Module (APM)
- 2. VERY HIGH RESPONSIVITY**  
Up to 20 000 V/W when using the Analog Power Module (APM)
- 3. VERY LARGE BANDWIDTH**  
From DUV to FIR thanks to pyroelectric technology
- 4. SMART INTERFACE**  
Containing all the calibration data

## AVAILABLE MODELS



UM9B-BL  
(9 mm-Organic Black)

## ACCESSORIES



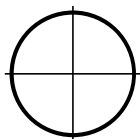
Stand with Delrin Post  
(Model Number: 200428)



Fiber Adaptors & Connectors  
(FC, ST or SMA)



APM Analog Power Supply  
(Model Number: 201848)



IR Alignment Aide  
and Crosshairs



SDC-500 Digital  
Optical Chopper

## SEE ALSO

TECHNICAL DRAWINGS	88
COMPATIBLE MONITORS	
MAESTRO	20
M-LINK	32
LIST OF ALL ACCESSORIES	186

### APPLICATION NOTE

SDC-500 DIGITAL OPTICAL CHOPPER	<a href="#">202154</a>
IR WINDOWS	<a href="#">202192</a>

MONITORS  
ENERGY DETECTORS  
POWER DETECTORS  
HIGH POWER SOLUTIONS  
PHOTO DETECTORS  
THZ DETECTORS  
OEM DETECTORS  
SPECIAL PRODUCTS  
BEAM DIAGNOSTICS

## UM-B



\*Also traceable to NRC-CNRC

## SPECIFICATIONS

## UM9B-BL

<b>MAX AVERAGE POWER</b>	25 mW
<b>EFFECTIVE APERTURE</b>	9 mm Ø
<b>COMPATIBLE MONITORS</b>	APM and Power Monitors

<b>MEASUREMENT CAPABILITY</b>	With APM	With Monitor
Spectral Range *	0.1 - 20 µm	0.1 - 20 µm
Maximum Measurable Power	40 mW	20 mW (MAESTRO), 25 mW (M-LINK)
Noise Equivalent Power (RMS)	5 nW	300 nW
Rise Time (0-100%)	≤ 0.2s	≤ 0.2s
Sensitivity	20 000 V/W	120 V/W
Calibration Uncertainty	±4 % @ 1064 nm	±4 % @ 1064 nm
Chopper Frequency <sup>a</sup>	10 ± 1 Hz	10 ± 1 Hz
Maximum Average Power Density (1064 nm)	50 mW/cm <sup>2</sup>	50 mW/cm <sup>2</sup>

**PHYSICAL CHARACTERISTICS**

Effective Aperture	9 mm Ø
Absorber	Organic Black
Dimensions	38.1Ø X 26.2D mm
Weight	91 g

<b>ORDERING INFORMATION</b>	With APM	With Monitor
Product Name	UM9B-BL-L-D0	UM9B-BL-D0
Product Number (Including stand)	202241	202024
Add Extension for INTEGRA		-INT

Specifications are subject to change without notice

\* For the calibrated spectral range, see the user manual.

a. SDC-500 Digital Optical Chopper sold separately.