

# 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
5. **NEW** INCLUDES AN ISOLATING TUBE TO BLOCK UNDESIRE NOISE FROM THE ENVIRONMENT.

## 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)  
See page 57 for specs.



SDC-500 Digital  
Optical Chopper

*This product cannot be used with DB-15 extension cables*

## SEE ALSO

TECHNICAL DRAWINGS	<b>96</b>
COMPATIBLE MONITORS	
MAESTRO	<b>20</b>
M-LINK	<b>32</b>
LIST OF ALL ACCESSORIES	<b>198</b>

### 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-L-D0	UM9B-BL-D0
<b>MAX AVERAGE POWER</b>	200 $\mu$ W	20 mW (MAESTRO), 25 mW (M-LINK)
<b>EFFECTIVE APERTURE</b>	9 mm $\emptyset$	
<b>COMPATIBLE MONITORS</b>	APM	Power Monitors
<b>MEASUREMENT CAPABILITY</b>	With APM	With Monitor
Spectral Range *	0.1 - 20 $\mu$ m	0.1 - 20 $\mu$ m
Maximum Measurable Power	200 $\mu$ W	20 mW (MAESTRO), 25 mW (M-LINK)
Noise Equivalent Power (RMS)	5 nW	300 nW
Rise Time (0-100%)	$\leq$ 0.2s	$\leq$ 0.2s
Sensitivity	20 000 V/W	120 V/W
Calibration Uncertainty	$\pm$ 4 % @ 1064 nm	$\pm$ 4 % @ 1064 nm
Chopper Frequency <sup>a</sup>	5 $\pm$ 1 Hz	10 $\pm$ 1 Hz
<b>DAMAGE THRESHOLDS</b>		
Maximum Average Power Density (1064 nm)	50 mW/cm <sup>2</sup>	50 mW/cm <sup>2</sup>
<b>PHYSICAL CHARACTERISTICS</b>		
Effective Aperture	9 mm $\emptyset$	
Sensor	Pyroelectric	
Absorber	BL	
Dimensions	38.1 $\emptyset$ 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 (without stand)	202241	202024

Specifications are subject to change without notice // Compatible stand : P/N 200428

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

a. SDC-500 Digital Optical Chopper sold separately.

MONITORS

ENERGY DETECTORS

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