

MiniRad

Fast Multi-Spectral Radiometer

The **MiniRad** is a fast radiometer performing simultaneous multi-spectral radiometric measurements with high sensitivity and speed.

Measure signatures of fast transients.

Up to 4 user-defined spectral bands and parallel video for documentation.



- Multi-Spectral fast radiometer with rise time below 10 μ sec
- Supports up to 4 different spectral channels
- Channels are customer configurable and cover the range 0.2÷14 μ m
- Field of view (FOV) options for 40 or 80 mrad with the ability to add telescopes for wide or narrow FOV
- User replaceable spectral and ND filters easily replaced during operation
- Built in data acquisition with USB2.0 data connection to a host computer
- Fully computer controlled



יארד פתרונות חישה בע"מ
גור, 30065 972-4-8216402 טל : 972-4-8216396 פקס :
Yagur 30065, ISRAEL Tel:+972-48216402 Fax:+972-48216396
E-mail: INFO@IARD.co.il Web Site: www.IARD.co.il

IARD
sensing solutions

MiniRad

Minirad Platform Specifications

Specifications apply to all MiniRad radiometers.

You may choose up to 4 channels per MiniRad to fit your needs.

Parameter	Value	Comments
Number of Channels	Up to 4	Only 2 LN2 Cooled
Spectral band	Channels available from the UV to the LWIR	Enquire for available channel options
Filters	1 spectral filter 1 ND filter	2 filter slides in the optical path per channel
Attenuators set	ND1, ND2, ND3	for each channel
Filter Slides	Accommodate 1" dia. filter, 1.6 mm thick	Included for each channel, filters are user mountable
Optics clear aperture	23mm or 48mm	Enquire for available channel options
Field of View (FOV)	2.3° (40 mrad) or 4.6° (80 mrad)	Enquire for available channel options Optional attachable telescopes
Field of View non-uniformity	< 10% of maximum	
Field of view Size accuracy	< ±10% FWHM	
Channel Bore sight Accuracy	±0.2° (±3 mrad)	
Video aiming sight	Color CCD camera with cross hair and FOV boundary	Allows aiming the radiometer and recording for documentation
Video aiming sight FOV	> 5° or > 10°	Bore sight accuracy is better than 3mrad
Rise time	< 10µsec	
Radiometer bandwidth	> 60kHz	-3db
Gain Selection	1, 10, 100	SW selectable
Dynamic range	> 70db	> 12 significant bits (for a single gain/attenuator setting)
Data Acquisition	16 bit 240 Ks/sec/channel	
Data interface	USB 2.0	
Control Interface	2x RS232	Convertible to USB
Analogue Outputs	Signal ± 10VDC	Differential output
Optical head to controller distance	5 meter cable to the PC	
Power supply	100 - 240 VAC 50-60 Hz (3A)	External power supply with 5m cable
Weight:		
Radiometer head	< 15 Kg	Depending on channel configuration
Power supply	3.5 Kg	
Dimensions:		
Radiometer head	294(W) x 330(H) x 615(L) mm	With shade cover
Power supply	160(W) x 92(H) x 370(L) mm	
Condensation prevention	Dry N ₂ purge valve available	
Environmental Conditions:		
Operation	0°C - 40°C	Non condensing
Storage	-15°C ÷ 70°C	In carry case
Carry case dimensions	L 857 x W 730 x H 429 mm	Rugged carry case with compartments for cables and accessories

Custom configurations are available – Please enquire.