

# ABRIS M series

Converts 350-2000nm radiation to visible

M1300  
M1700  
M2000

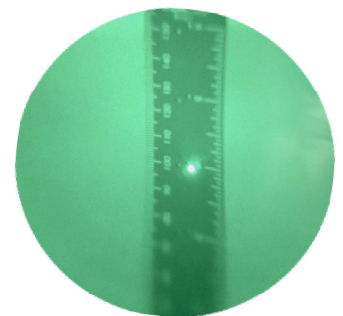
## Applications:

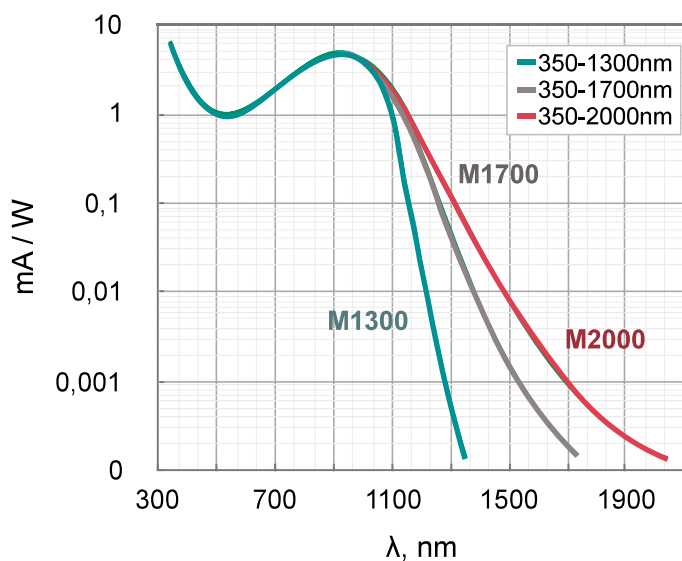
- Location and alignment of Nd:YAG, Yb:YAG, Yb:KGW, Ti:Sapphire and other IR lasers
- Identification of stray IR reflections
- Observation of GaAs laser diodes, IR LED's, dye and other IR-sources
- Forensic analysis on inks, pigments



## Main features:

- Wide spectral region 350 – 2000 nm
- Lightweight and ergonomic design
- High contrast
- High sensitivity
- Excellent image quality
- Hand-held / post mounted
- Works with C-mount lenses (with adapter)
- Battery (35 hours continuous working) + DC powered
- Pulsed and CW light detection without synchronisation
- Connects to PC via video adapter
- Interfaces to CCTV cameras



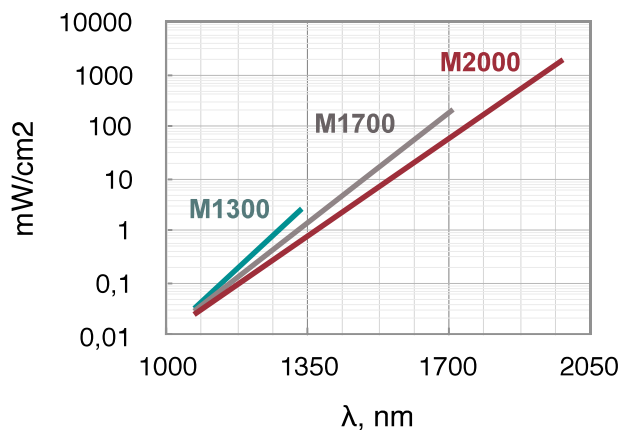


### How does it work?

Infrared viewer focus emitted or reflected light from a chosen subject into the image tube where electron image is generated. When powered (with battery or power supply) the 16-18 kV voltage is generated required to accelerate the electron image into the output phosphor screen. The fluorescent green light output (550 nm) is observed via an adjustable eyepiece lens.

### Power density

Approximate minimum of power densities required to view an infrared laser beam from a distance of one meter:



### Technical parameters

Version	1 (1X)	2 (2X)
Spectral sensitivity	ABRM-1300-x (350-1300nm)	ABRM-1700-x (350-1700nm)
		ABRM-2000-x (350-2000nm)
Resolution (center)	60 Lp/mm	60 Lp/mm
Field of view	40°	20°
Magnification	1X	2X
Objective lens	F1.4/26mm	F1.8/50mm
Adjustable iris	Available	Included
Focus	0.15m (0,05m)* to inf	0.5m (0,15m)* to inf
Working distance of lens	12.5 (+/-0.2) mm	12.5 (+/-0.2) mm
Battery type	1.5V, 1xAAA	
Non-uniformity of screen	<20%	
Non-uniformity of response	<15%	
Distortion of image	<18%	
Battery life (continuous)	35 hours	
External power supply	DC 3V, 30 mA	
Weight	0.38kg	0.42kg
Dimensions	140x78x52 mm	145x78x52 mm
Temperature range	-10°C...40°C	
Tripod or handle connection	R"1/4"	
* with distance ring		

### Accessories available

- Iris diaphragm (for F1.4/26mm)
- Neutral density filter to lens 1X (3-5%@1064nm)
- Neutral density filter to lens 2X (3-5%@1064nm)
- Microscope adapter
- Facemask for hands free operation
- IR illuminator 940nm, 800nm

- C-mount Camera adapter
- Lens 2X (F1.8/50mm)
- Lens 1X F(1.4/26mm)
- Distance ring
- C-mount adapter for any C-mount lens
- Video adapter VA-1