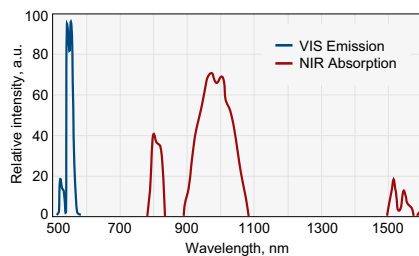


LASER DETECTION CARDS

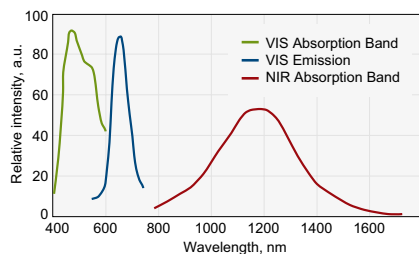


Features

- Covering Visible and Near-IR (NIR) spectral ranges
- Plastic, credit-card-sized (86 × 54 mm)
- Large sensor area (54 × 44 mm) extending to the edges



990-0847 NIR Detection Card



990-0846 VIS & IR Detection Card

Laser detection cards provide instant, fade free operation for simple alignment, location and safety purpose visualization of laser light. They are made of durable 0.8 mm plastic and have photosensitive region 44 x 54 mm that extends all the way to the three edges of the cards to facilitate use in laser alignment procedures.

990-0846 VIS & IR Laser Detection Card

Laser detection card has a sensitive active region which can be used to visualize weak power laser beams, to detect beam reflections or scattered IR laser light. Proper function of this card requires charging it with visible/day light before use. Additionally, because emissions from the active region are not

persistent, the user must move the card around for optimal brightness of the beam spot.

990-0847 NIR Laser Detection Card does not require charging. The emission is persistent even when used in CW applications in a darkened room. In addition, when the active region is used in a darkened room with sufficiently bright source, the fluorescence from the activated photosensitive region can be seen through the back side or the photosensitive region can be activated by illuminating the back of the card. This is especially useful for aligning the overlap of two beams.

Specifications

Model	990-0846 VIS & IR Detection Card	990-0847 NIR Detection Card
Absorption Bands	400 – 640 nm 800 – 1700 nm	790 – 840 nm 870 – 1070 nm 1500 – 1590 nm
Emission Bands	Broadband 600 – 730 nm Peak @ 660 nm	520 – 580 nm Peak @ 550 nm
Persistence (stimulation removed)	VIS: 0.5 – 3 s, dependent on ambient light IR: <0.5 s	800 μs
Minimum Stimulation Continuous ¹⁾	<1 nW/cm ² @ 450 nm <25 μW/cm ² @ 950 nm	<2 μW/cm ² @ 808 nm <175 nW/cm ² @ 960 nm <100 μW/cm ² @ 1550 nm
Minimum Stimulation Pulsed ¹⁾	2 kW/cm ² @ 1064 nm, 7 ns, 10 Hz	250 kW/cm ² @ 1064 nm, 7 ns, 10 Hz
Maximum Stimulation Continuous	100 W/cm ² @ 512 nm	100 W/cm ² @ 1064 nm
Maximum Stimulation Pulsed	60 MW/cm ² @ 1064 nm, 7 ns, 10 Hz	35 MW/cm ² @ 1064 nm, 7 ns, 10 Hz
Typical Applications	Ar-Ion, HeNe, HeCd, 880 nm, 960-980 nm laser diodes, Yb:KGW, Nd:YLF, Nd:Glass, Nd:YAG	808 nm, 820 nm, 830 nm, 880 nm, 960-9680 nm laser diodes, Yb:KGW, Nd:YLF, Nd:Glass, Nd:YAG, 1550 nm telecommunications

¹⁾ Measured in darkened conditions.

Catalogue code	Spectral range	Price, EUR
990-0846	400 – 640 and 800 – 1700 nm	65
990-0847	790 – 840, 870 – 1070 and 1500 – 1590 nm	65