

IR Sensor Card / Low Power 5 – 20 μm

Model LDT-5-20-L

This Infrared sensor product has been developed to offer greater performance compared to the products existing. It is an easy and advanced way to detect, locate and analyze laser beams which have a **low or medium laser power density between 5 – 20 μm** .

The Model LDT-5-20-L consists of a plastic card with two sensitive areas which change color in response to IR light sources. **The choice of the area to use depends on beam power** (see Table below). The sensitive areas are suitable for laser sources in the 5 – 20 μm range.

The sensitive zone „LOW“ is green while the „HIGH“ area is orange. A white spot appears as a result of Infrared radiation on both areas. The beam spot size on the sensor card depends on laser power: the higher the laser power the larger the beam spot. When the radiation is stopped, the initial coloring rapidly re-appears.



Specifications

	Model LDT-5-20-L	
	„Low“	„High“
Wavelength range	5 μm to 20 μm	
Sensitivity threshold	Approx. 0.2 W/cm ² *	Approx. 1.5 W/cm ² *
Maximum power density	Approx. 4 W/cm ² *	Approx. 8 W/cm ² *
Active area	40 x 25 mm	40 x 25 mm
Dimensions	86 x 54 mm	

* Measurement done at 10.6 μm

Covers new spectral range

The Model LDT-5-20-L is sensitive in the 5 – 20 μm wavelength range.

Reliable visualization

The sensor areas offer high performance thanks to color change with high contrast. This allows easy location of beams even in a dark room.

High sensitivity

Due to high efficiency, this sensor card can detect IR laser sources with power densities down to 0.2 W/cm².

Easy to use and handle

This model is credit card size with two sensor areas of 10 cm² each.

Ideal for wide field applications

This sensor card can be used to align optical set-up or to locate an IR beam in an experimental set-up.

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IR Sensor Card / High Power 5 – 20 μm

Model LDT-5-20-H

This Infrared sensor product has been developed to offer greater performance compared to the products existing. It is an easy and advanced way to detect, locate and analyze laser beams which have a **high laser power density** between 5 – 20 μm .

The Model LDT-5-20-H consists of a ceramic card with a sensitive area which changes color in response to IR light sources. **The sensitive area is suitable for laser sources in the 5 – 20 μm range.**

The sensor card can be used in two different ways (see Table below):

- For low power densities, the card is used conventionally by directly exposing the sensitive area (orange) to infrared radiation. It is the **“Reflection Method”**.
- For high power densities, the back of the sensitive area (uncolored) is exposed to radiation. It is the **“Transmission Method”**.



Specifications

	Model LDT-5-20-H	
	« Reflection Method »	«Transmission Method »
Wavelength range	5 μm to 20 μm	
Sensitivity threshold	Approx. 10 W/cm ² *	Approx. 25 W/cm ² *
Maximum power density	Approx. 30 W/cm ² *	Approx. 50 W/cm ² *
Active area	40 x 52 mm	40 x 52 mm
Dimensions	86 x 54 mm	

* Measurement done at 10.6 μm

Covers new spectral range

The Model LDT-5-20-H is sensitive in the 5 – 20 μm wavelength range.

Reliable visualization

The sensor area offers high performance thanks to color change with high contrast. It allows easy location of beams even in a dark room.

High damage threshold

Due to high efficiency, this card can detect IR laser sources with powers up to 50 W/cm².

Easy to use and handle

This model is credit card size with a sensor area of 20.8 cm².

Ideal for wide field applications

These sensor cards can be used to align optical set-ups or to locate an IR beam in an experimental set-up.

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