

## **IDT4** series



The **IDT40** is a laser module with a slim 20 mm diameter aluminium housing.



This laser can be equipped with different diffractive optics to project sharp dot, line, multiline, cross, grids or special patterns.

Each laser of this series can be customized according to the needs of our customers.

It is also suitable for indoor applications where the work environment is particularly bright and can easily be installed or retrofitted on many types of machinery.

The **IDT40** has operating voltages of 5 VDC or 24 VDC.

The laser beam is focused to minimize spot size and give the sharpest possible projections.

## **Electrical and Optical Specifications**

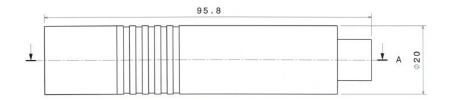
| Available<br>Wavelengths<br>(nm)   | From 375 to 488                                                                             | 520            | From 635 to 690 | From 700 to 1770 |
|------------------------------------|---------------------------------------------------------------------------------------------|----------------|-----------------|------------------|
| Available<br>power outputs<br>(mW) | 0.6—200                                                                                     | 0.6-60         | 0.5-200         | 0.5-200          |
| Supply Voltage<br>(V)              | 24 Vdc                                                                                      | 24 Vdc         | 5—24 Vdc        | 5—24 Vdc         |
| Operating Current<br>(mAh)         | From 20 to 300                                                                              | From 20 to 160 | From 20 to 250  | From 20 to 300   |
| TTL Modulations                    | Available<br>(to 3MHz)                                                                      |                |                 |                  |
| Electrical isolation               | Potential-free housing                                                                      |                |                 |                  |
| Protections                        | Over temperature protection, reverse polarity and transient protection (ESD, burst & surge) |                |                 |                  |

| Optical Specifications      |                                                                                                              |
|-----------------------------|--------------------------------------------------------------------------------------------------------------|
| Beam size<br>at aperture    | °/e2 60                                                                                                      |
| Ray stability<br>(mRad/°C)  | 0.01                                                                                                         |
| Fan angles <sup>*2</sup>    | 5°, 10°, 20°, 30°, 45°, 60°, 75°, 90° (homogeneous lines)<br>10°, 15°, 20°, 30°, 90° (Gaussian line profile) |
| Line straightness           | <0,05 %                                                                                                      |
| Line uniformity             | >25 % ( Gaussian )                                                                                           |
| <b>Optics</b> <sup>*2</sup> | Point elliptical, point circular, multi line, crosses, grids ecc.                                            |
| Focus range                 | 10 mm up to 10.000 mm (fixed focus)                                                                          |

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## **Mechanical Specifications** Length 95.8 mm Size Diameter 20 mm Pin 1 : positive - Pin 3 : negative White wire : positive **Power connections** Brown wire : negative Anodised aluminium Housing 1, 1M,2,2M,3R,4 Safety Class 4-pin M12 plug Connections



| Environmental Specifications |                                |  |
|------------------------------|--------------------------------|--|
| Protection                   | IP 66 and IP 68 certified      |  |
| Storage<br>temperature       | -40 to +85 °C                  |  |
| Operating<br>temperature     | -80 to +50 °C                  |  |
| MTTF                         | From 10.000 to 15.000 h/25°C*3 |  |

For high power we recommended to provide the laser with an additional form of external heatsinking.

Upon request, lasers and their accessories can be customized

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