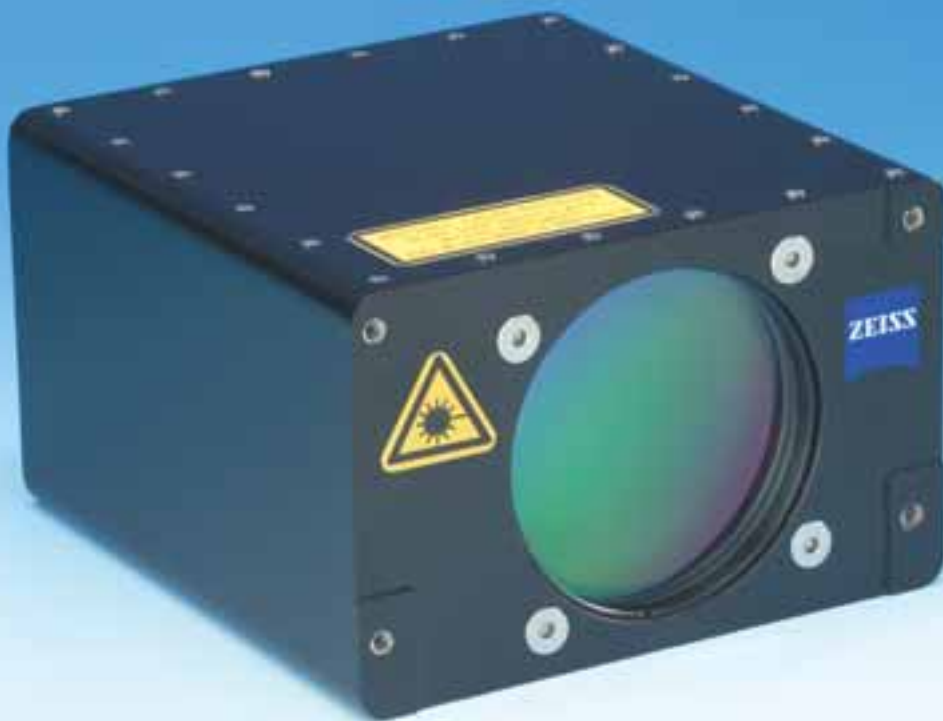


LDM 38

Laser Rangefinder



- High Range
- High Repetition Rate
- Lightweight
- Compact
- Eye-Safe
- Ruggedized
- Integrated BITE



We make it visible.

Applications

LDM 38 completes the line of successful eye-safe Laser Rangefinders designed and produced by Carl Zeiss Optronics GmbH. Never before such a compact and lightweight rangefinder reached a comparable high range and repetition rate.

LDM 38 fulfils as independent sensor unit the requirements of modern optronic reconnaissance and target tracking systems that require a high repetition rate of measured ranges from fast moving targets.

LDM 38 may be adapted optimally and cost-effectively to a multitude of applications by modification of the performance data and/or the functions.

Configurations

- Range-finding up to 3 pps Burst
- Integrated filter for extended laser protection (option)
- Harmonisation of additional sensors in a platform to the transmitter and receiver axis using a target point visible in the optical interface
- Attachment options in various plans
- Adaptable data interface

Features

- Eye-safe range-finding
- Compact, lightweight
- Coaxial transmitter and receiver optics
- Full performance from the first range-finding on
- Ruggedized, meets severe environmental conditions
- High reliability, low maintenance
- Integrated BITE

Options

- Increased range capability by use of APD receiver (LDM 43)
- Integration of EMI filter to comply with MIL STD 1275A and MIL STD 461/462 (LDM 38-461)

Technical Data

Transmitter

| | |
|---------------------------------------|------------------------------|
| Laser type | Nd:YAG, OPO shifted |
| Wavelength | 1570 nm |
| Pulse energy | 8 mJ |
| Pulse width (FWHM) | approx. 4 ns |
| Maximum repetition rate | 3 pps Burst (Duty cycle 1:4) |
| Beam divergence (1/e) | 0.4 mrad |
| Laser class | 1M IEC 60825/2001 |
| Nominal Ocular Hazard Distance (NOHD) | 0 m |

Receiver

| | |
|---------------|-------------------------------------|
| Detector type | InGaAs PIN InGaAs APD (optional) |
|---------------|-------------------------------------|

Range Data

| | |
|--------------------------------|------------------------------------|
| Accuracy | ± 5 m |
| Range | 100 m to 20 000 m |
| Resolution | 5 m |
| Multiple target discrimination | 20 m |
| Range gate | 105 m to 19 995 m, steps of 5 m |
| Logic | First-/Last echo, selectable |

Mechanical Interface

| | |
|--------------------------------------|--------------------------------|
| Mass | 1.5 kg |
| Dimensions (length x width x height) | 73 x 114 x 123 mm ³ |

Optical Interface

Coaxial transmitter/receiver aperture ø 56 mm

Electrical Interface

| | |
|----------------|---------------------------------|
| Power | 18 - 32 VDC, ≤ 3 A at 28 VDC |
| Data Interface | RS 422, RS 485 or CAN open |

Environmental Conditions

| | |
|-----------------------|--------------------|
| Operating temperature | - 35 °C to + 63 °C |
| Storage temperature | - 40 °C to + 70 °C |

Carl Zeiss Optronics GmbH

Carl Zeiss Group
73446 Oberkochen
Germany
Phone: +49 7364 20-65 30
Fax: +49 7364 20-36 97
optronics@zeiss.de
www.zeiss.com/optronics