# LASE 3000D-C1-11x SERIES

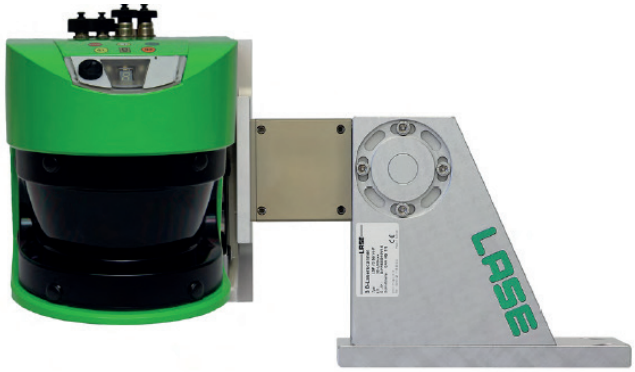
With its large measuring range, huge scan angle and high angular resolution the LASE 3000D-C1-11x Series is suitable for a huge variety of industries and applications such as:

- Measurement of dimensions, profiles or levels of objects and environments
- Object positioning
- Container recognition/measurement in ports
- Support of crane open-loop controls by goods detection
- Object protection
- Bulk material measurement at heaps, piles, bunkers or trucks

## THE SENSOR

The laser scanners out of the LASE 3000D-C1-11x Series are three-dimensional measurement devices which are especially built for measurements in harsh industrial environments and for numerous outdoor purposes.

The high performance 3D laser scanners from the product range of the LASE 3000D Series are based on the components of a 2D laser scanner out of the LASE 2000D-11x-Series and a swiveling platform which is powered by a servo-drive. A high resolution encoder on the servo-drive measures the angle of rotation of the platform and by connection of the 2D laser data with the encoder data, high precision 3D profile measurements are produced. Optionally LASE can provide sophisticated software either to control and collect data from the laser scanner or for complete measurement solutions.




## SCOPE OF DELIVERY

- 3D laser scanner
- Operating instruction
- CD-ROM

## THE FEATURES

- Contactless long range 3D profile measurement
- Range of up to 40 m on dark natural surfaces
- Range of up to 80 m on natural surfaces
- Scan area up to 190° x 200° (scan/swivel)
- Interfaces: Ethernet TCP/IP, RS-232, CAN, USB (service only)
- Rugged constructon type to IP 65

## THE BENEFITS

- High accuracy, high resolution and fast measuring rate
- Unique stable object detection
- Self-test incorporated
- User friendly software
- Simple installation
- Outdoor applicable due to integrated heating

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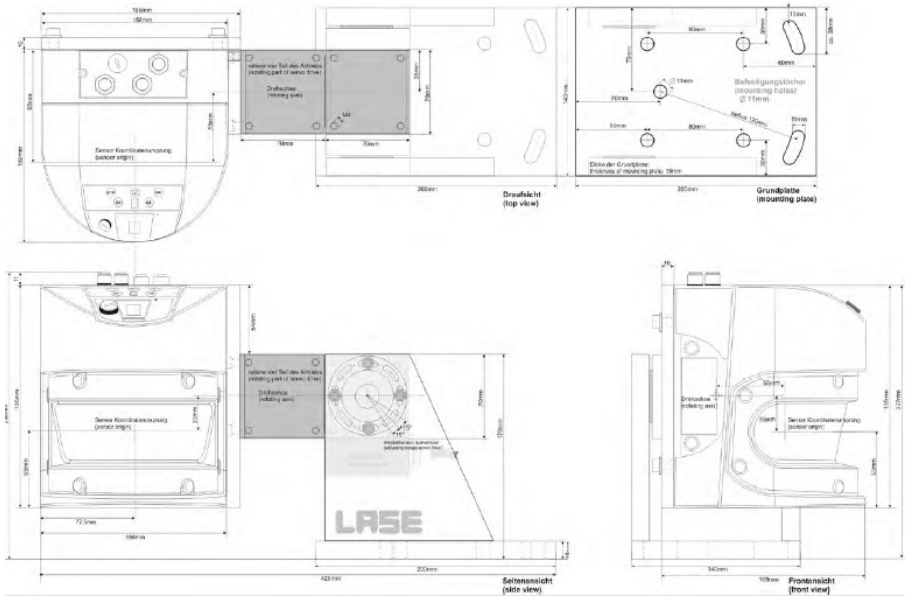
# TECHNICAL DATA: LASE 3000D-C1-11x SERIES

| LASE 3000D-C1 | -118 | -119 | INFO |
|---|---|---|---|
| **DISTANCE MEASUREMENT** | | | |
| Measurement range | 0,7 … > 26 m | 1 … > 40 m | at 10 % target reflectivity |
| | 1 … > 80 m | | at 90 % target reflectivity |
| Resolution | ± 12 mm | ± 24 mm | |
| Beam divergence | 4,7 mrad | 11,9 mrad | |
| Laser safety class | class 1 | | EN/IEC 60825-1:2014; eyesafe |
| Visual displays | 5 x LED | | additonal 7-segment display |
| **SCAN AND PROFILE MEASUREMENT** | | | |
| Usable scan angle | 190° | | |
| Angular step width | 0,167°, 0,25°, 0,333°, 0,5°, 0,667°, 1° | | choosable |
| Scan frequency | 25 Hz, 35 Hz, 50 Hz, 75 Hz, 100 Hz | | |
| Rotation angle: platform | up to ± 100° | | |
| Angular resolution: platform | up to 0,002° | | |
| Swivel speed | max. 150°/s | | |
| **INTERFACES** | | | |
| Ethernet | 100 Mbit/s | | TCP/IP, OPC |
| USB (service only) | max. 500 kBaud | | reduced data rate |
| CAN | 250 kBaud | | communication servo drive |
| **ELECTRICAL & MECHANICAL** | | | |
| Power supply | 24 VDC ± 3% / 12 A | | |
| Protection class | IP 65 | | to EN 60529 |
| Weight | Platform: approx. 5 kg | | |
| | Scanner: approx. 3,7 kg | | |
| **ENVIRONMENT DATA** | | | |
| Temperature range | Operation: -25° C ... +50° C | | with optional heating system |
| | Storage: -10° C ... +70° C | | |
| Shock & Vibration | IEC 68 | | to EN 60068-2-27, 60068-2-28, 60068-2-29 |
| **OPTIONS** | | | |
| Connection box | Power supply 24 VDC / 15 A | | |
| | Ethernet 5-port switch | | |
| | CAN-Ethernet converter | | |
| | Fuses, terminals, fittings | | |
| Cable set | Required data and power lines in lengths of: 5 m, 10 m or 20 m | | |

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