

# LASE 3000D-C3-245

With its large measuring range, scan angle and high angular resolution the LASE 3000D-C3-245 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
- » Object protection
- » Bulk material measurement at heaps, piles, bunkers or trucks

## THE SENSOR

The laser scanner LASE 3000D-C3-245 is a three-dimensional measurement device which is 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-245 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.

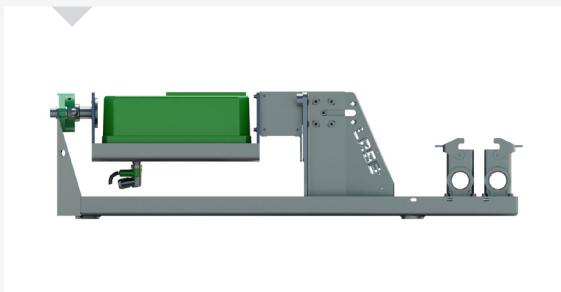


## SCOPE OF DELIVERY

- » 3D laser scanner
- » Operating instruction

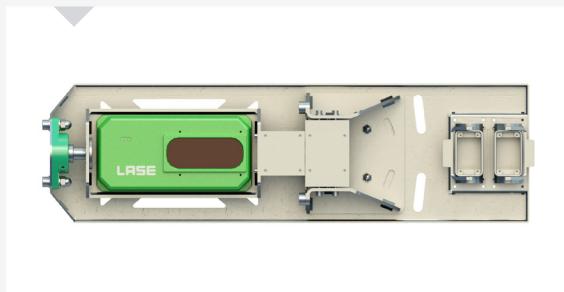
## THE FEATURES

- ✓ Contactless long range 3D profile measurement
- ✓ Range of up to 160 m on dark natural surfaces
- ✓ Range of up to 500 m on natural surfaces
- ✓ Scan area up to 120° x 180°
- ✓ Interfaces: Ethernet TCP/IP, RS-232, CAN-Bus
- ✓ Rugged construction type to IP 67



## 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



## TECHNICAL DATA: LASE 3000D-C3-245

LASE 3000D-C3	-245	INFO
<b>DISTANCE MEASUREMENT</b>		
Distance Range	1.8 ... 500 m	White, 100% reflectivity
	1.8 ... 160 m	10% target reflectivity
Accuracy	≤ 5 mm	Repeatability 1σ at strong signal
	≤ 20 mm	Repeatability 1σ at weak signal
Laser spot size	≤ 5 mm	Systematic error
	12 x 18 mm 15 x 24 mm	at Sensor window at 40 m range
Divergence	0.5 mrad	Vertical
	0.7 mrad	Horizontal
Resolution	1 mm	
Laser pulse rate	Up to 100 kHz	
Laser class	1	EN/IEC 60825-1:2014
<b>INTERFACES</b>		
Ethernet	TCP/UDP 100 Mbits/s	Real time data output
RS232	115 kBaud, 8n1	Configuration and FW updates
<b>ELECTRICAL &amp; MECHANICAL</b>		
Voltage	24 VDC or PoE	PoE with Injector
Voltage - direct	DC Input 24 V ±5 V	
Power consumption	12 W (heater off), 36 W (heater on)	
Startup time	< 30 s	
Protection class	IP 67	
Enclosure	Aluminium	seawater resistant
Dimension	247 mm x 121 mm x 109 mm	
Weight	2.8 kg	
<b>ENVIRONMENT DATA</b>		
Operating temperature range	-30°C ... +50°C	Temperatures > 50°C on request
Storage temperature range	-30°C ... +70°C	
<b>SCAN &amp; PROFILE MEASUREMENT</b>		
Scan angle	1 to 120°	Adjustable
Step Width	0.18°	Fast-Mode
	0.09°	Normal-Mode
	0.045°	Fine-Mode
	0.0225°	Interlaced-Mode
	666	Fast-Mode (at 120°)
Measuring points (per scan)	1333	Normal-Mode (at 120°)
	2666	Fine-Mode (at 120°)
	5332	Interlaced-Mode (at 120°)
	25 / 50 / 100 Hz	