LaseAFM-4
Automatic Freight Measurement

Highly exact 3D-Laser measurement technology for the multi-dimensional freight measurement of bulky goods
3D-FREIGHT MEASUREMENT

LaseAFM-4 - Automatic Freight Measurement

The accurate and automatic 3D-Laser volume measurement in combination with the freight weight generate reliable freight data for tasks like:

- Optimal container- and truck loading
- Fair freight rating
- Process- and data security (no manual data handling)
- Business partners stay together by using an accurate and automatic measurement system (manual measurements can be faulty)
- Detection of the enveloping freight volume

The Measurement Sequence

1. Freight is placed in measuring station
2. Freight-ID is scanned by hand-held scanner
3. Automatic initiation of the measurement process
4. Freight volume measurement by 3D-Laser scanner
5. Freight weight measurement by weighing system
6. Image data acquisition by HD camera
7. Data transfer to WMS-/ERP-System

Easy and accurate...

The Perfect Volume!

Fast and multi-dimensional...

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
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### The Benefits

**All data in ONE application...**

- Automatic volume measurement
- Fast and efficient
- Low resource requirements
- High accuracy
- Automatic weight measurement (Module Weight)
- Freight identification (Module Ident)
- Loggable freight data
- 4.0-capable
- Modular and compact system (mobile, overhead construction)
- Usable for oversize freight by extendable measuring area

### The Technical Data

<table>
<thead>
<tr>
<th><strong>MODULE VOLUME</strong></th>
<th>Measuring heads</th>
<th>2-4</th>
<th>as required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. object size</td>
<td>2 m x 2 m x 2 m</td>
<td>bigger frames optional</td>
<td></td>
</tr>
<tr>
<td>Min. object size</td>
<td>0,2 m x 0,2 m x 0,2 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring time</td>
<td>≈ 6 sec.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 2 cm</td>
<td>in all dimensions</td>
<td></td>
</tr>
</tbody>
</table>

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<tr>
<th><strong>MODULE WEIGHT</strong></th>
<th>Min. weight</th>
<th>10 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. weight</td>
<td>2,000 kg</td>
<td>higher weights optional</td>
</tr>
<tr>
<td>Accuracy</td>
<td>approx. 0,5 kg</td>
<td>gauging optional</td>
</tr>
</tbody>
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<th><strong>MODULE IDENT</strong></th>
<th>1D-Barcode-Hand-held scanner</th>
<th>applicable for all common barcodes</th>
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</table>

| **MODULE COMMUNICATION**| Interface | Ethernet TCP / IP to WMS- / ERP-System |
LASE is one of the worldwide leading companies for laser-based sensor applications for the industry.

We offer innovative and productive solutions by combining state-of-the-art laser technology and sophisticated software applications. The broad product range of precise and reliable 1D-, 2D- and 3D laser measurement systems can be applied for several industry sectors. Profiles, positions, dimensions and volumes can be determined exactly.

Founded in 1990, our German-based company became a Global Player throughout the years that is internationally represented by branch offices or distributors. A close cooperation with our customers is important for us with a high emphasis on an efficient and successful project implementation.

COMPETENCE, CREATIVITY AND PASSION distinguish us!