



Monitor volume, fill levels and material surface with Terabee multi-sensor level measurement solution

### Turn your material stock into digital data!

Continuously measure material fill level by installing compact, high-performance and rugged **optical Time-of-Flight sensors** on the top of your containers (silos, tanks, bins) or stockpiles.

Raw distance-to-material data is collected from each level sensor and sent to a central gateway - known as the **Stock Level Supervisor**. The Supervisor provides power management to sensors, and features on-the-edge computation - turning incoming distance data into accurate **level or volume estimations** of the remaining material stock.

### Key product features

- Single and multi-container monitoring applications
- Contactless and safe inventory management
- Capable of long-range level measurements (0.5m to 60m)
- Onboard software for fast and easy system setup
- Real-time edge computing of material level and volume
- Water-resistant and dust-proof (IP65) enclosure
- Data communication via Ethernet

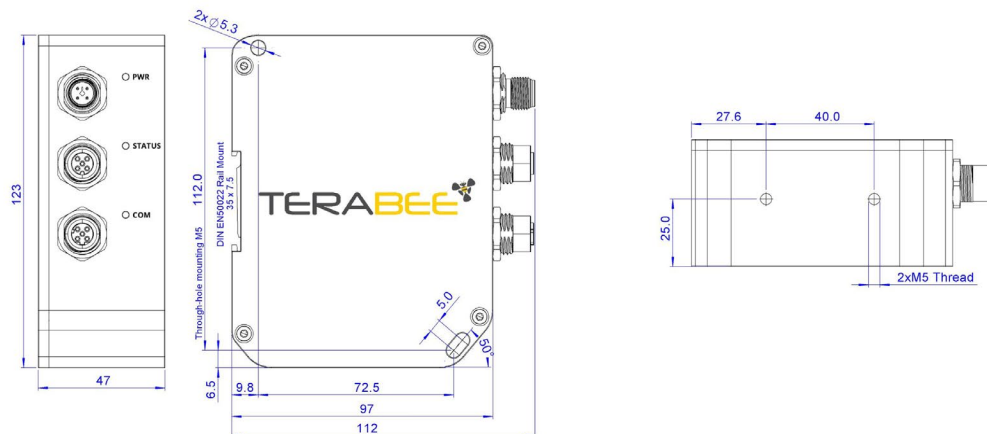
### Technical specifications



Stock Level Supervisor	
No. of Sensors Connected	Up to 8 sensors (extension to 32 sensors possible)
Data Output	<ul style="list-style-type: none"> <li>Distance 1 (sensor to material surface) in mm</li> <li>Distance 2 (material surface to container bottom) in mm</li> <li>Computed level in percentage (%)</li> <li>Computed volume in liters (l)</li> </ul>
Accuracy <sup>(1)</sup>	Distance: $\pm 4$ cm in the first 14 m; $\pm 1.5\%$ beyond 14 m Volume / Level: depending on application conditions
Update Rate	1 measurement every minute
Internet, Data Communication	Ethernet - 100 mbps
Interface, System Configuration	Ethernet - 100 mbps WiFi - 2.4 GHz / 5 GHz IEEE 802.11.b/g/n/ac
Communication Protocol	Sensors: Modbus RTU Data: Modbus TCP/IP
Type of Connection	Power: M12 t-coded male connector, 4-pin Sensors: M12 a-coded female connector, 5-pin Data: M12 d-coded female connector, 4-pin
Supply Voltage	24V DC +/-10%
Current Consumption (8 Sensors @ +45°C)	Minimum: 350 mA Average: 410 mA Maximum: 700 mA
Visual Notification	3 x LEDs (multicolor)
Dimensions (LxWxH)	112 x 47 x 123 mm
Weight	480 g
Housing Material	Polyurethane, Aluminium
Housing Protection	IP65
Ambient Temperature Operation	-10°C to +45°C
System Configuration	Yes, via web-based software
Mounting	DIN EN50022 Rail 2 x M4 Through-hole 2 x M4 Screws

(1) Accuracy of volume and level calculations will strongly depend on the overall container dimensions, number of sensors used, container size and architecture, available space for sensor positioning, material type and distribution.

### Dimensions



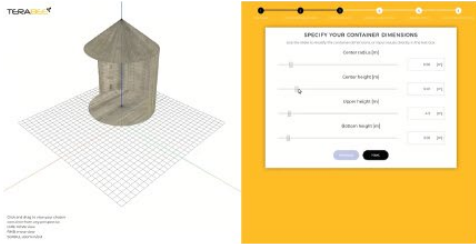


### Product listing

Product code	Product / version	Included	Units
TB-SLMS-1	Stock Level Monitoring System x 1	<ul style="list-style-type: none"> <li>Stock Level Supervisor</li> <li>Stock Level TOF Sensor</li> </ul>	<p>1</p> <p>1</p>
TB-SLMS-4	Stock Level Monitoring System x 4	<ul style="list-style-type: none"> <li>Stock Level Supervisor</li> <li>Stock Level TOF Sensor</li> </ul>	<p>1</p> <p>4</p>
TB-SLMS-8	Stock Level monitoring System x 8	<ul style="list-style-type: none"> <li>Stock Level Supervisor</li> <li>Stock Level TOF Sensor</li> </ul>	<p>1</p> <p>8</p>
TB-SLS	Stock Level TOF Sensor <i>(operated through Supervisor)</i>	<ul style="list-style-type: none"> <li>Stock Level TOF Sensor</li> </ul>	<p>1</p>



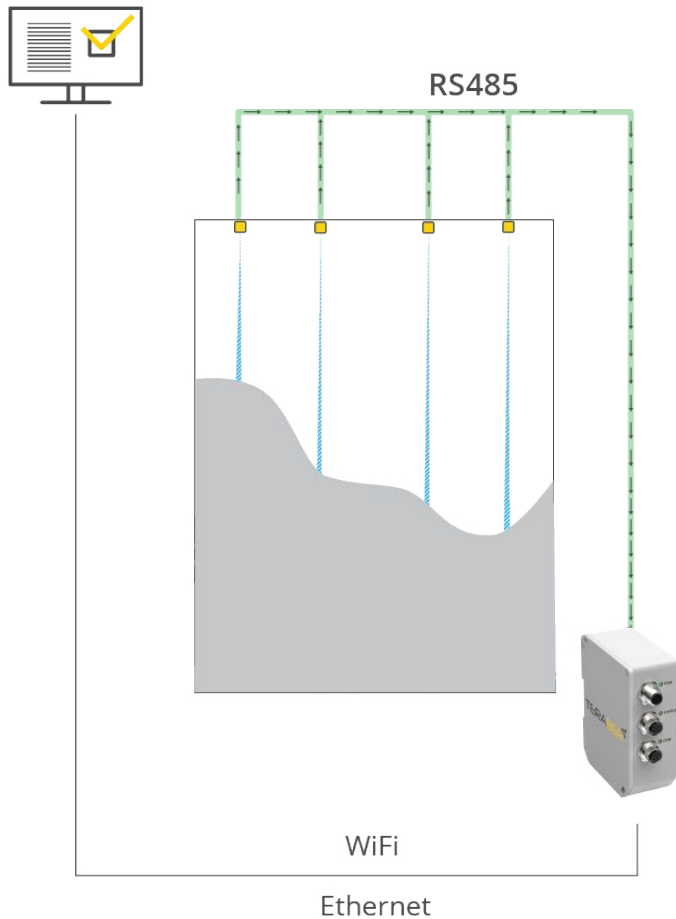
### Up and running in 4 easy steps!



**1** Configure the system using the application, with a direct connection to the Supervisor



**2** Install the Stock Level TOF Sensors at the top of your containers



**3** Wire the sensors to the Stock Level Supervisor using RS485 cables



**4** Connect the Supervisor to a PLC via Ethernet, and provide a 24V DC power supply



### You're all set!

Receive computed volume and level estimations or benefit from raw distance data directly from the Supervisor!