

⚠ Critical Handling Warning

- **Do not bond directly to rigid surfaces:** Under no circumstances should the BG51-OEM sensor be bonded directly to a rigid surface.
- **Risk of damage:** Mechanical stress on the sensor can easily damage the shielding foil, leading to severe device malfunctions.

1. Enclosure 3D Printing & Design Integration

For optimal protection, it is highly recommended to house the sensor in a dedicated protective enclosure.

- **3D Printing Files:** STL files for manufacturing an optimized protective enclosure is ready for download at <https://www.teviso.com>.
- **Design Flexibility:** The protective enclosure is designed for space-saving integration into the mechanical structure of your measuring device. It can be utilized either with or without its cover.



BG51-OEM Protective Enclosure

2. Installation & Fixation Steps

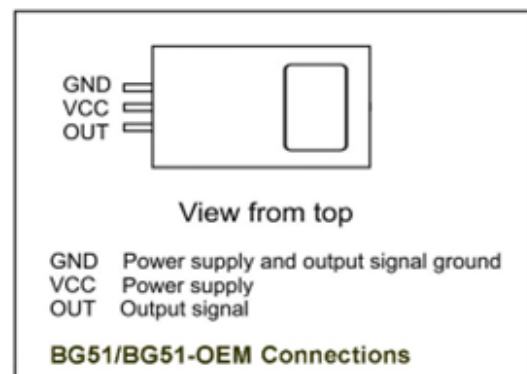
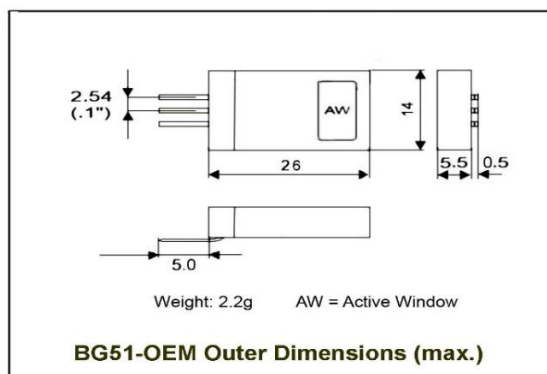
To properly secure the BG51-OEM sensor inside the protective enclosure, adhere to the following guidelines:

- **Adhesive Selection:** Use only an **elastic adhesive** to mechanically secure the sensor inside the enclosure to prevent mechanical stress.
- **Sensor Alignment:** Position the active area (containing the PIN diodes) directly above the **semi-transparent window** of the protective enclosure.
- **Clearance:** Ensure the semi-transparent section of the protective enclosure remains **completely free of adhesive or bonding agents**.
- **Structural Integration:** For optimum stability and efficient space utilization, integrate the enclosure directly into the mechanical structure of the host measuring device.

3. Enclosure Dimensions

Configuration	Length (L)	Width (W)	Height (H)
With Cover	28.00 mm	16.00 mm	7.25 mm
Without Cover	28.00 mm	16.00 mm	6.60 mm

4. BG51-OEM Dimensions and Connections



5. Soldering

Method: Manual soldering is recommended.

Parameters: Maximum temperature: 360°C. Maximum contact time: 5 seconds.