# ABOUT THE GSR

The TMSi GSR module makes it possible to measure Galvanic Skin Response, also commonly known as ElectroDermal Activity (EDA).

The intended use of the GSR module is to measure changes in resistivity/conductivity of the skin due to changes in perspiration. The module measures the voltage over the attached SNAP electrodes that is generated by a precision 1µA current source.

The GSR module is not intended to be used in a life-support system.

This datasheet is valid for devices with REF 95-0520-0015-0-X, with X representing the product revision consisting of one or two digits.

## Notes

- The output may vary greatly across subjects due to differences in skin physiology, and may also vary due to ambient circumstances like temperature and humidity.
- Pressure changes on the electrodes will usually induce large artefacts, keep the electrode sites as still as possible.

## Maintenance

The product requires no maintenance. It may be cleaned, if deemed necessary, as follows:

- Before cleaning make sure the product is turned off and not in contact with a patient.
- Only use tap water, if necessary with a mild detergent, applied through a soft damp cloth.
- Never use aggressive chemicals for cleaning.
- Do not sterilize the product.

## Contact Information TMSi

TMSi Support can be reached via email (support@tmsi.com) or by phone during office hours (CET). When you send us an email, please provide as much information as possible, including serial numbers of the used products. You may find the REF code and/or serial number on the device but also always on the package label. The REF code starts with 95 followed by two groups of four digits to identify the product type, it ends with two groups of one- or two digits identifying variant and revision of the product. The serial number always has ten digits. This will help us to support you in the best way possible.

**Contact Information**
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## Technical Specifications

| Physical Data | |
|---|---|
| **Weight (approximately)** | 26 g |
| **Length** | 1.5 m |
| **Outer material of the cable** | PVC YM2 |
| **Size of the box** | 50 mm x 40 mm x 15 mm |
| **Outer material of the box** | ABS |

| Measurement Properties | |
|---|---|
| **Offset** | -3.0 V |
| **Current source** | 1.0 µA (±20 nA) |
| **Current source impedance** | 2 GΩ (typical) |
| **Output range** | -3 V to +3 V |
| **Allowed Temperature range** | (0 to 40) °C |
| **Power consumption** | <35 mW |
| **Input connectors** | Snap 4 mm |

| Measurement Properties with use of EPROM data | |
|---|---|
| **Measurement dimension** | MΩ (Mega Ohm) |
| **Measurement Range*** | (0 to 6) MΩ |
| **Accuracy over 0.2-6 MΩ** | 1% between 20-30 °C<br>2% over full temperature range |

* The specified measurement range is only valid when patient ground is attached.