

## STM 550 (Revision DC) Multisensor Module

**STM 550 is an energy-harvesting wireless sensor that communicates based on the EnOcean Alliance radio standard.**

**STM 550 can be easily mounted onto desks, walls or equipment to report temperature, humidity, illumination, door / window status and utilization / orientation.**

STM 550 integrates sensors that measure temperature, humidity, illumination, acceleration and magnet contact status (open or closed). STM 550 transmits the measured values of these sensors every 2 minutes.

STM 550 immediately transmits a status update if an acceleration event (STM 550 is being moved or shaken) is detected after a period without such an event or if the magnet contact status (open / closed) changes.

STM 550 provides an integrated NFC interface for device configuration and commissioning. In addition, STM 550 contains an LRN button that can be used for simple commissioning tasks.



STM 550 contains a solar cell that is optimized to generate energy from available ambient light.

STM 550 operates self-supplied for typical indoor lighting scenarios (200 lux for 6 hours/day). For use cases with insufficient available light, it is possible to mount a backup battery.

STM 550 is available as module in PTM 21x form factor for integration into OEM designs or as product kit which additionally contains wall mount, front cover, magnet and adhesive tape.

### Order information

Type	Frequency	Variant	Order Code
STM 550	868.300 MHz	Module	S6201-K516
STM 550 KIT		Kit	B6201-K516

### Features overview

<b>Transmission Frequency / Data Rate</b>	868.300 MHz / 125 kbps
<b>Transmission Power</b>	+10 dBm
<b>Transmission Range (for guidance only)</b>	typ. 200 m free field / 30 m indoor environment
<b>Temperature Measurement Range / Accuracy</b>	-5 °C ... +45 °C / ± 0.3 K
<b>Humidity Measurement Range / Accuracy</b>	0 ... 90 % r.h. / ± 3% r.h.
<b>Illumination Measurement Range / Accuracy</b>	0 ... 2000 lux / ± 5 % of full scale
<b>Acceleration Measurement Range / Accuracy</b>	± 2 g / ± 5 % of full scale
<b>Acceleration Wake Threshold</b>	0.03 g
<b>Update Rate (excl. random offset)</b>	Every 2 minutes
<b>Device Configuration</b>	NFC (ISO 14443)
<b>Supported EEP (selectable via NFC)</b>	D2-14-41 (default) D2-14-40, A5-02-05, A5-04-01, A5-04-03 A5-06-02, A5-06-03, A5-14-05, D5-00-01
<b>Power Supply</b>	Integrated solar cell
<b>Autonomy (operation time without light)</b>	4 days (after full charge)
<b>Backup Battery Type (if required)</b>	CR1632
<b>Dimensions</b>	40 mm x 40 mm x 13 mm
<b>Operating Conditions</b>	-5°C ... +45°C / 0 ... 90% r.h. (non-condensing)

Notes: STM 550 is designed for indoor use only and should only be used in the specified environmental conditions

If a parameter depends on the device configuration, then the value corresponding to default settings is provided