

STM 550J (Revision DB) Multisensor Module

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

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

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

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

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



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

STM 550J 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 550J 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 550J	928.350 MHz	Module	S6261-K516
STM 550J KIT		Kit	B6261-K516

Features overview

Transmission Frequency / Data Rate	928.350 MHz / 125 kbps
Transmission Power	0 dBm
Transmission Range (for guidance only)	typ. 150 m free field / 20 m indoor environment
Temperature Measurement Range / Accuracy	-5 °C ... +45 °C / ± 0.3 K
Humidity Measurement Range / Accuracy	0 ... 90 % r.h. / ± 3% r.h.
Illumination Measurement Range / Accuracy	0 ... 2000 lux / ± 5 % of full scale
Acceleration Measurement Range / Accuracy	± 2 g / ± 5 % of full scale
Acceleration Wake Threshold	0.03 g
Update Rate (excl. random offset)	Every 2 minutes
Device Configuration	NFC (ISO 14443)
Supported EEP (selectable via NFC)	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
Power Supply	Integrated solar cell
Autonomy (operation time without light)	4 days (after full charge)
Backup Power Supply (optional)	CR1632
Dimensions (STM 550J module)	40 mm x 40 mm x 13 mm
Operating Temperature / Humidity	-5°C ... +45°C / 0 ... 90% r.h. (non-condensing)

Notes: STM 550J 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