

Magnet Contact Transmitter Module STM 425J / STM 429J

The radio transmitter modules STM 425J and STM 429J from EnOcean enable the implementation of a wireless magnet contact sensor.

Powered by a solar cell, they work absolutely maintenance-free.

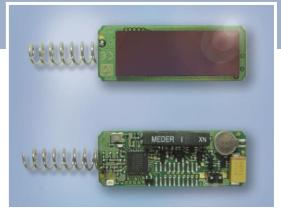
An integrated energy store allows operation for several days even in total darkness. Additionally STM 425J provides enhanced security features with encrypted communication.

Key applications are window and door sensors.

Functional Principle

STM 425J and STM 429J supervise an integrated reed contact and report every status change immediately (open<>closed).

In addition a sign of life signal is transmitted every 20-30 minutes.





Features Overview

Power supply	provided by a small solar cell
Antenna	pre-installed helical antenna
Frequency	928.35 MHz
Conducted output power	typ. 0 dBm
Data rate / Modulation type	125 kbps FSK
Radio Regulations	ARIB STD-T108
EnOcean Equipment Profile	D5-00-01
Start-up time with empty energy storag	typ. <2.5 min @ 400 lux, 25°C
Initial operation time in darkness @25°	C ¹ typ. 6 days, if energy storage fully charged
Reed contact	1x internal, Meder MK23-90-BV14496 or MK01-I
Teach-in button S	TM 420J sideward oriented / STM 429J vertically oriented
Transmission indicator	1x LED
Module dimensions	43 x 16 x 6 mm
Operating temperature ¹	-20 up to +60 °C
Security Level Format (STM 435J)	24-bit RLC, No RLC tx, 4-byte CMAC, VAES encryptior

¹ Full performance is achieved after several days of operation (up to two weeks) at good illumination level. Performance degrades over life time, especially if energy storage is exposed to higher temperatures. Each 10 K drop in temperature doubles the expected life span.