

EMCSA is an energy-harvesting wireless magnet contact sensor for EnOcean systems. Powered by a solar cell, EMCSA works absolutely maintenance-free. An integrated energy store allows operation for several days in total darkness. In dark surroundings, a coin cell battery can be retrofitted.

The small housing can easily be mounted to windows or door frames or at cabinets using the included double-sided adhesive pad. The ultra-slim magnet has a preassembled adhesive pad.

EMCSA supervises an integrated reed contact and reports every status change immediately (open<>closed). In addition a sign of life signal is sent at regular intervals. EMCSA provides the option to use Enhanced Security mode with encrypted communication and Rolling Code.



Type
EMCSA

Ordering Code
S3001-C320

Primary power supply	Solar harvesting of indoor light (incandescent or fluorescent)
Backup power supply	Optional battery (CR1225, not included)
Radio standard / frequency / transmission power	EnOcean / 868.300 MHz / +5 dBm
Antenna / Transmission range	Internal helix antenna / 300m free field, typ. 30 m indoor
EnOcean module integrated	STM 320
EnOcean Equipment Profile (EEP)	D5-00-01
Supported security algorithms	VAES 128, CMAC, RLC counter
Reed contact	1 x internal (marking on housing side)
Charge time before linking ⁽¹⁾	Typ. 2.5min @ 400 lx / 4 min @ 200lx
Sustain condition for battery free operation	min. 400 lxh per day (signs-of-life only, 25°C)
Operation time in darkness ⁽²⁾	Typ. 6 days
Teach-in telegram trigger and indicator	Pushbutton and LED
Sign-of-life transmission	Contact status update every around 20...30 minutes
Dimensions of unit housing	76.2 x 22 x 15 mm
Dimensions of housing adhesive	50 x 18 x 0.8 mm
Dimensions of magnet (incl. adhesive)	20 x 10 x 1.5 mm
Housing, color and material	White, similar to RAL 9010, PC/ABS
Operating conditions	-20...+60 °C, 0...93% r.h., non-condensing, IP 40, indoor use only
Storage conditions	Recommended: +10...30 °C, <60% r.h., max. 36 months ⁽³⁾
Approvals	CE, RED
Single unit pack (sensor unit, magnet, adhesive, instructions)	Card box 32 x 32 x 99 mm
Minimum order quantity / shipping box	50 units, card box 232 x 176 x 174 mm, 1.8 kg

Note 1: Charge time at 25°C from empty energy store until a teach-in telegram can be sent

Note 2: Operation time at 25°C is 6 days from a fully charged energy store with telegrams sent on average every 25 min (signs-of-life). Operation time is 3 days from a fully charged energy store if telegrams are sent on average every 6 minutes (10 contact events per hour)

Note 3: After 36 months in darkness the energy storage should be recharged to keep storage performance