

SmartOpen® *opens doors and gates hands-free.*

SmartOpen®
is so versatile:



LED illuminated SmartOpen® reader



in private buildings



in administrative buildings



in garages and driveway gates



in industrial buildings



in offices, doctors' surgeries,
legal offices etc.

SmartOpen® turns your
car key into a master key
for your doors and gates:

- > Convenient and hands-free
- > A single key for everything
- > No more searching for keyholes
- > No more fumbling in the dark

Also works with a chip card

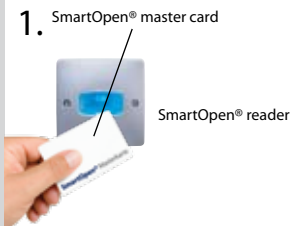
made
in
Germany

Safeguard. Protect. Find.

TeraTron

It's so easy with SmartOpen®:

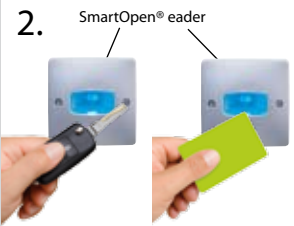
1. SmartOpen® master card



SmartOpen® reader

The SmartOpen® master card is used to start a simple learning process. The electronic chip in your car key and/or chip card is recognised and read in seconds and the data is stored.

2. SmartOpen® reader



The SmartOpen® reader now permanently detects whether your key or your chip card is authorised to open your door or gate - all you have to do is to hold the key or the chip card in front of the SmartOpen® reader.

Technical requirements - all you need is:

- > a car key from 1995 or later ...
- > ... or a commercially available chip card
- > a door or gate with an electrical opening device.

SmartOpen® components:



SmartOpen® is so secure and convenient:

- > **100% convenience:** No searching for your keys, no fumbling with the lock in the dark - LED illuminated SmartOpen® reader.
- > **100% secure:** The SmartOpen® reader only recognises your previously learnt keys or chip cards. If you change your car or lose your key or chip card, the authorisations can be deleted again in seconds.
- > **100% extendible:** SmartOpen® can simultaneously manage up to 100 keys. New keys can be learnt with minimum effort. Chip cards for alarm, time recording or access control systems can also be used with SmartOpen®.
- > **100% flexible:** SmartOpen® works with all commonly available car keys with an immobiliser function, whatever the make*.

SmartOpen® is easily installed:


The reader is supplied as an encapsulated, weatherproof unit, complete with a 10 m connecting cable, and can thus also be installed outdoors. The hole spacing matches commonly used fitting standards (cavity wall box, external switch for garage door opener). Operational readiness of the reader is indicated via its blue or red LED. The switching actions are handled by the associated controller which is fitted out of sight in a flush-mounted box in the secure indoor area.

The SmartOpen® PC software (<http://www.smartopen.de/downloads.html>) offers additional functions for managing the keys and chip cards. Selection of blue or red illumination, setting of various brightness levels and complete deactivation of the illumination are all configurable via the software.

SmartOpen® Technical Data:

SmartOpen® Technical Data:

SmartOpen® components



SmartOpen® reader (LED illuminated) with a 10 m connecting cable

SmartOpen® controller

SmartOpen® master card

SmartOpen® controller

Power supply

Bell transformer: 8-12V AC, other transformer types: 8-12V AC (no-load voltage max. 15V)
Stabilised: 9-12V DC
non-stabilised: max. 20V DC with no load

Current consumption max. 150 mA (effective)

Relay contact Contact type: Potential-free break/make contact (configurable via sliding switch), switching voltage: max. 30V AC / max. 40V DC, switching current: max. 2A AC/DC, switching time: 1 - 40 sec. (configurable via potentiometer)

Temperature range -20°C - +50°C

Protection class IP20

Operating area Installed indoors

Dimensions (W x H x D) 45.0 mm x 45.0 mm x 17.5 mm

Dimensions incl. fixing lugs (W x H x D) 55.0 mm x 45.0 mm x 17.5 mm

Installation location 55 mm standard switch box

Weight 25 g

Interface (for software updates and configuration) USB

SmartOpen® is easily installed:

The reader is supplied as an encapsulated, weatherproof unit, complete with a 10 m connecting cable, and can commonly be installed outdoors. The hole spacing matches commonly used fitting standards (cavity wall box, external switch for garage door opener). Operational readiness of the reader is indicated via its blue or red LED. The switching actions are handled by the associated controller which is fitted out of sight in a flush-mounted box in the secure indoor area.

The SmartOpen® PC software (<http://www.smartopen.de/downloads.html>) offers additional functions for managing the keys and chip cards. Selection of blue or red illumination, setting of various brightness levels and complete deactivation of the illumination are all configurable via the software.

SmartOpen® reader

Scanning frequency	120 kHz - 140 kHz
Temperature range	-30°C - +70°C
Protection class	IP66
Operating area	indoors or outdoors
Cable length	10 m, braid 4 x 0.14 mm ²
Installation location	55 mm standard switch box
Dimensions (W x H)	80 mm x 80 mm
Height above mounting surface (T)	11.7 mm
Depth below mounting surface (T)	27.7 mm
Colour	white, optionally available in silver
Material	ASA (weatherproof and UV-resistant)
Weight without cable	85 g
Background illumination, configurable	Dual LED, blue / red (configurable brightness levels + deactivation)
Reading distance	Typically 0.2 - 7 cm (depending on the transponder type and construction and the reader installation location)

Certification/Miscellaneous

CE	EN 300 330 / EN 301 489 -1,-3
Distance between two readers	min. 0.75 m
Memory capacity	100 different transponders

Scope of delivery

- 1 SmartOpen®(r) reader with a fixed 10 m cable, incl. 2 mounting screws (Torx-10, 3 x 20 mm)
- 1 SmartOpen® controller
- 1 SmartOpen® master card
- 1 operating instructions
- 1 Torx-bit TX-10 and 1 small screwdriver for slotted screws

> Further information: www.smartopen.de - www.teratron.de

*Not all Mercedes keys are recognized since they use a different key technology. Subject to technical changes.



Complete technical data

* Not all Mercedes keys are recognised since they use a different key technology

Subject to technical changes

SmartOpen® Technical Data:

SmartOpen® components



SmartOpen® is easily installed:

The reader is supplied as an encapsulated, weatherproof unit, complete with a 10 m connecting cable, and can thus also be installed outdoors. The hole spacing matches commonly used fitting standards (cavity wall box, external switch for garage door opener). Operational readiness of the reader is indicated via its blue or red LED. The switching actions are handled by the associated controller which is fitted out of sight in a flush-mounted box in the secure indoor area.

The SmartOpen® PC software (<http://www.smartopen.de/downloads.html>) offers additional functions for managing the keys and chip cards. Selection of blue or red illumination, setting of various brightness levels and complete deactivation of the illumination are all configurable via the software.

SmartOpen® reader

Scanning frequency	120 kHz - 140 kHz
Temperature range	-30°C - +70°C
Protection class	IP66
Operating area	indoors or outdoors
Cable length	10 m, braid 4 x 0.14 mm ²
Installation location	55 mm standard switch box
Dimensions (W x H)	80 mm x 80 mm
Height above mounting surface (T _A)	11.7 mm
Depth below mounting surface (T _B)	27.7 mm
Colour	white, optionally available in silver
Material	ASA (weatherproof and UV-resistant)
Weight without cable	85 g
Background illumination, configurable	Dual LED, blue / red (configurable brightness levels + deactivation)
Reading distance	Typically 0.2 - 7 cm (depending on the transponder type and construction and the reader installation location)

SmartOpen® controller

Power supply	Bell transformer: 8-12V AC, other transformer types: 8-12V AC (no-load voltage max. 15V) Stabilised: 9-12V DC, non-stabilised: max. 20V DC with no load
Current consumption	max. 150 mA (effective)
Relay contact	Contact type: Potential-free break/make contact (configurable via sliding switch), switching voltage: max. 30V AC / max. 40V DC, switching current: max. 2A AC/DC, switching time: 1 - 40 sec. (configurable via potentiometer)
Temperature range	-20°C - +50°C
Protection class	IP20
Operating area	Installed indoors
Dimensions (W x H x D)	45.0 mm x 45.0 mm x 17.5 mm
Dimensions incl. fixing lugs (W x H x D)	55.0 mm x 45.0 mm x 17.5 mm
Installation location	55 mm standard switch box
Weight	25 g
Interface (for software updates and configura-	USB

Certification/Miscellaneous

CE	EN 300 330 / EN 301 489 -1, -3
Distance between two readers	min. 0.75 m
Memory capacity	100 different transponders

Scope of delivery

1 SmartOpen(r) reader with a fixed 10 m cable, incl. 2 mounting screws (Torx-10, 3 x 20 mm)
1 SmartOpen® controller
1 SmartOpen® master card
1 operating instructions
1 Torx-bit TX-10 and 1 small screwdriver for slotted screws

> Further information:

www.smartopen.de · www.teratron.de

* Not all Mercedes keys are recognised since they use a different key technology

Subject to technical changes

