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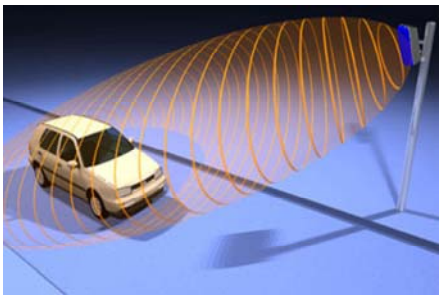
ELECTRONIC HARDWARE AG

Legic (or Mifare) Long-Range Booster

The system



The Legic long-range booster is a radio link based transmission system for all Legic badge Data for a distance from 10 to 100 meters. Maximal transmission distance can be adapted for each installation, according application needs. System consists of a mobile booster (the sender) and a fix installed base station (receiver). By using the Legic booster, a remote control of gates and doors for the existing access control systems can be achieved. The Legic long-range boosters allows for a comfortable and secure access into a protected campus or security area. Another advantage is the accelerated flow of traffic and hence less opening time for each gate / door, as well as the well documented access transactions.

The Legic long-range booster can be used instead of a conventional Legic-reader and will integrate seamless in an existing access control system (exos, SiPass, etc.). All personal badge data on the radio link is protected by ciphering / coding.

Mobile Transmitter

The onboard mobile Legic long-range booster sender reads the data of an inserted Legic-badge card and after a button press, stores and analyses the data.
As soon, as the sender enters the antenna field of a Legic booster receiver, the sender codes the data and sends it to the receiver. Built-in LEDs signalise the whole communication, the result of the transaction and the battery status, as well as any errors occurring.

Receiver

Any booster data from the sender are automatically received by the receiver antenna and analysed by the decoding electronics. After decoding, the Legic badge data are sent via interface to an access control system. Different enclosure boxes and mounting units exist for harsh environment conditions. Variouse interfaces connect the receiver with any access control system (Kaba exos, Siemens SiPass or any other access control system).
In case you are missing an interface to your access control system, let us know. ER System SA is happy to provide you with a new, customer specific interface.

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Technical data

- Reads any Legic badge data, when operating the read and transmit button, and stores the data in the sender electronics for later transmission via radio link
- The booster-sender and the personal badge (Legic-badge) are recognised by the base station (receiver) (ISO / IEC 9798-2)
- Any transmitted data between sender and receiver is coded / ciphered
- The mobile Legic long-range booster sender minimises the energy needed, as to a new battery lasts for at least one year of operation
- Optical status indicators (LEDs) on the booster sender, document every status and transaction of the sender and the radio link

Carrier frequencies	according European & US Standards
Data transmission rate	0 - 100 KBit/s

Legic long-range booster sender (LBS)

Box size	116 x 76 x (14/35) mm
Box weight (without badge)	150 g
Operat. temperature range Booster	-20 to +60°C
Battery type	2 x 3V – lithium-batteries
Box type booster	Plastic waterproof IP40
Transmission distance radio link	10 - 100 m adjustable (line-of-sight)

Legic long-range booster receiver (LBR)

Box size (standard box)	240 x 160 x 60 mm
Weight base unit	650 g
Operat. temperature range base unit	-20 to +60°C
Power (volt)	$12V_{DC}$ / $24V_{DC}$
Interface base unit	RS 232, RS 485 optional
Mechanical fixation base unit	C-Clamp
Box type base unit	Waterproof plastic IP54 or IP65

The detection of the direction of a vehicle (incoming or outgoing) is possible, when using two **2 (two) receivers** (1 x incoming receiver plus 1 x outgoing receiver).

The Legic long-range booster system complies to the European standards 99/5/EG (R&TTE)

Architecture - Legic long-range booster