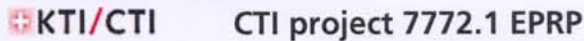
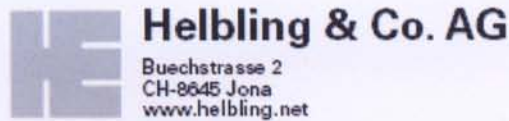


Inductively powered wireless Emergency Access System

Partners:



Our partner, Helbling & Co. AG, is a leader in key box security systems, which are steel tubes embedded in walls containing building keys. These tubes are opened by an authorized person using a master key to get access to the building key.

The main problem of these systems is the need for a master key, since these master keys can be lost, stolen, copied or misused.

The HSR Institute for Communication Systems (ICOM) has developed an emergency access system (EAS), consisting of an e-lock and an e-key. This EAS does not require a master key, but replaces this key with cryptographically secure electronic code which is wirelessly transmitted from the e-key to the e-lock. This code, which is generated by a back office, allows an authorized person during a given timeframe to open a particular key box once.

Furthermore, to make the EAS independent of a power source, the e-lock is inductively powered by the e-key. Hence the key boxes have no electrical terminals or contacts and require no maintenance.



Application-oriented Research and Development, Consulting, Services

IMES	Institute for Microelectronics and Embedded Systems
ICOM	Institute for Communication Systems
ITA	Institute for Internet Technologies and Applications
IFS	Institute for Software
IET	Institute for Energy Engineering
IMA	Institute for Mechatronics and Automation Engineering
IPEK	Institute for Product Design, Development and Engineering
IWK	Institute for Material Technologies and Plastics Processing
SITEC	Institute for Plant and Safety Engineering
SPF	Institute for Solar Technologies
UMTEC	Institute for Environmental and Process Engineering
IBU	Institute for Civil and Environmental Engineering
FLE	Center for Landscape Development
FTL	Research Center for Leisure, Tourism and Landscape
GTLA	Institute for the History and Theory of Landscape Architecture
IRAP	Institute for Spatial Development, Applied Research and Planning Support

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