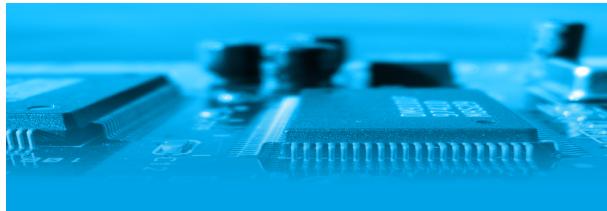




# PRODUCT DATASHEETS



## Highlights

### SIMPLICITY

The wiring and installation time is reduced thanks to the bus topology. The bus does not require to be configured or adjusted.

### SAVINGS

A single MLCK CUBE can manage 64 sensors. The number of deported modules is divided by 4, the power consumption and the size of boxes and power supplies are similarly decreased.

A specific register also enables the electric power supply for radars to be switched off excluding the monitoring period.

The module natively includes 5 inputs and 2 outputs on its board, without the need for transponders

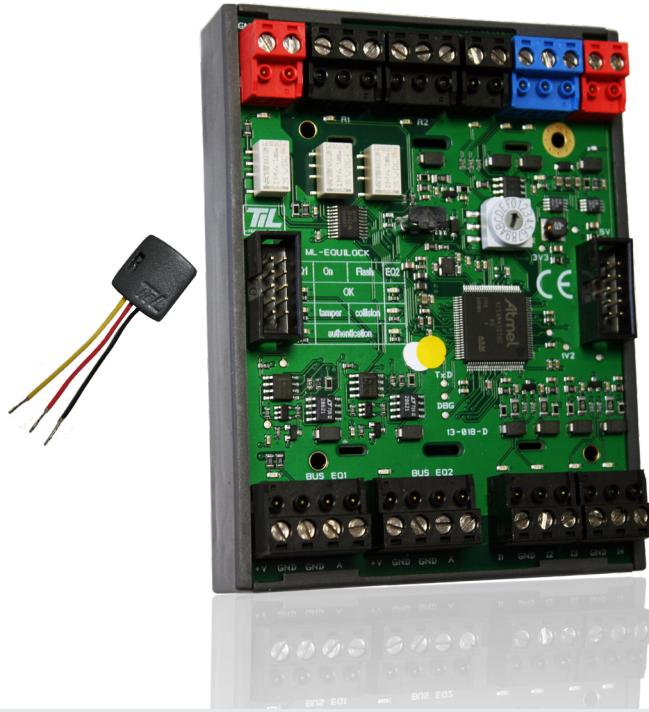
### COMPLETE SECURITY

The encrypted digital communication, associated with the each transponder's unique identifier thus avoids listening to the bus, replay and sabotage.

## Main features

- Each of the 2 buses present on the MLCK CUBE can connect up to 32 EQUILOCK transponders. The module can therefore manage up to 64 intrusion sensors + 5 inputs and 2 outputs present on its board.
- Each bus can stretch to a length of 300 m, a total coverage of about 600 m.
- It is not required to configure or adjust the bus.
- The MLCK CUBE module detects the bus short-circuit and when it is switched off.
- In the event of physical failure, each bus can be looped to limit the risk of losing the connection.

# MLCK CUBE INTRUSION MODULE



## Secure intrusion sensors

MLCK CUBE specialised module allows information to be transmitted from intrusion sensors (detection and self-protection) in bus topology. It can be connected to the secondary bus of a TILLYS CUBE controller unit and needs to manage transponders, which forms a unique system: EQUILOCK.

Transponders are small watertight modules (less than 1 cm<sup>3</sup>) that can be easily integrated into sensors in place of balancing resistors.

The advantage of this system is that with an EQUILOCK transponder on each sensor, the sensors are able to communicate on a single self-powered, secure bus connected to the TILLYS CUBE control unit. Each transponder has a unique identification number and the data transmission with the MLCK CUBE is encrypted. Any attempt at sabotage is immediately detected.

For ease of installation, a transponder programming tool can be used to number/address transponders, to identify them on the bus.

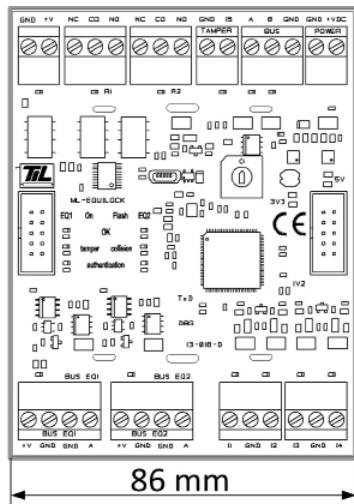
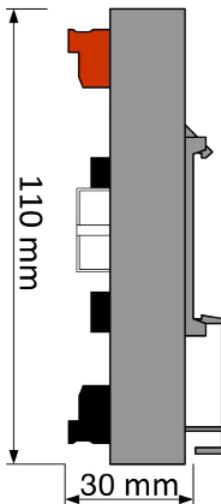
### INTEGRATED BMS, INTRUSION AND ACCESS CONTROL SYSTEM

TILLYS CUBE CONTROLLER UNIT	POWER SUPPLIES & BATTERIES	SPECIALIZED MODULES	RADARS & SENSORS	TRANSPOUNDER PROGRAMMING TOOL
				

# MLCK CUBE INTRUSION MODULE

## Dimensions

Front and side view



## Transponders integration

- Dimensions : 14x12x5 mm (head) + 45 mm cables (3)
- Assembly example : inside a radar



## Technical details

- Power supply : 12 V / 28 VDC
- Power consumption: 30 mA + 3mA per transponders
- Bus : RS 485
- Dimensions : H 110 mm x L 86 mm x D 30 mm
- Connections : plug-in screw terminals
- Contact distance between EQUILOCK bus and sensors : 300 m
- Contact distance between EQUILOCK bus and TILLYS NG : 600 m
- Maximum number of EQUILOCK inputs : 32 per bus (total of 64)
- Inputs on board : 5 configurable inputs, including 1 pre-set input for tamper protection. Balanced inputs offers many sets of resistances possible by TILLYS CUBE.
- Outputs on board: 2 bi-stable relay outputs with NO and NC switch, max. 2A, max. 48V, max. 48 watts
- Humidity : 0 - 95% without condensation
- Operating temperature : -10°C to +55°C
- Attachment : DIN rail or COF22 unit
- Number of modules that can be connected per TILLYS CUBE : Depending on the number of EQUILOCK transponders connected to the MLCK CUBE modules, it will be possible to connect from 4 to 16 modules
- Weight : 0.26 kg
- Compliance : CE, RoHS
- Environment : Very low power consumption, suitable for HQE/BBC buildings



## Product references

### Module

- MLCK-CUBE : EQUILOCK intrusion module for TILLYS CUBE (securized ANSSI bus), 2 buses with 32 transponders, DIN rail mounting

### EQUILOCK Transponders

- PROG-EQUILOCK : Programming tool for EQUILOCK transponders addressing
- EQUILOCK-10 : Set of 10 EQUILOCK transponders, free addressing. Quantity : 5 set or more  
If you need packs of pre-numbered transponders, please contact us.

### Case

- COF22 : Case with white plastic front and metal back, 220x188x40 mm + tamper protection kit

Contact : sales@hirschsecure.com  
www.til-technologies.com / www.hirschsecure.com