VOXIO-T (Touch Steel)

Interface: RS485 and “Clock/Data“ or “Wiegand“ D0/D1

Versions:

Standard	RFID Technology
VOXIO-T-1260-S	Multi-ISO reader (Basis LEGIC SM4200M) ■ LEGIC prime/advant ■ MIFARE Classic/DESFire/EV1/EV2/EV3 ■ CIPURSE ■ ISO14443 A+B / ISO15693 ■ capacitive keypad **Note:** LEGIC Media cannot be initialized

Surface mounted / with or without capacitive keypad

OEM reader module VOXIO

General Data

Applications

- Access control
- Time and attendance
- Data collection
- Parking systems, alarm systems
- General user identification

Special features

- Capacitive keypad
- Symbols and numbers backlit
- precious glass designs
- compact design
- Sturdy surface mounted housing (zinc die-cast galvanised and lacquered) with safety lock
- 2mm Xensation® glass
- Sturdy wall holder made of stainless steel
- Cable entry possibilities from behind through the mounting plate
- Sabotage detection
- Dismounting detection (Sabotage report is generated if reader is completely torn from the wall)
- Suitable for outdoors and indoors
- Connection via 8-pin screw terminal
- Space for additional modules (e.g. SAM, BLE, Südmetall radio module)

Technical data

- Power Supply
  8 … 30 V DC
  (internal protection for wrong polarity)
- Power consumption

max.:	3,5 W
typically:	2,5 W

- Temperature ranges:

- storage temperature	-30 °C to +70 °C
- operating temperature	-25 °C to +60 °C

Signal elements

- 3 LEDs / RGB multi-color
- White backlight for keypad and symbol (adjustable brightness)
- 1 speaker for acoustic signalisation (adjustable frequency)

Firmware / Software protocols

- phg_crypt
- active sending
- Magstripe Clock/Data and Wiegand D0/D1
- OSDP
- customer-specific (on request)

Note:
The support of the various RFID technologies (LEGIC prime/advant, MIFARE Classic/DESFire, CIPURSE) is depending on the software protocol
Detailed information on request

Dimensions and Weight

Height	135 mm
Width	135 mm
Depth	37 mm
Weight:	800 g

Protection class

- IP 55
  The reader is suited for direct outside mounting

IK classification

- IK09

Supported transponder media

The support of the listed transponder media generally depends on the used firmware.
The listing of the transponder media is without guarantee of completeness.
Continuative information can be received on request.

Compatibility Transponders / Hardwareplattform LEGIC SM 4200 M		
RF Standard	Supported LEGIC TXP	Supported 3rd party TXP with transparent mode
LEGIC RF standard	MIM22 MIM256 MIM1024 CTC4096-MM410 CTC4096-MP410	
ISO 14443 A (also NFC Forum Type 2/4ATag)	ATC512-MP ATC2048-MP ATC4096-MP CTC4096-MM410 CTC4096-MP410 AFS4096-JP	ISO 14443 part 3/4 compliant: e.g. Infineon SLE, SmartMX Integrated support of CIPURSE™ Integrated support of MIFARE Ultralight, MIFARE Classic, MIFARE Plus and MIFARE DESFire NFC P2P target
ISO 14443B (also NFC Forum Type 4B Tag)		ISO 14443 part 4 compliant: e.g. Infineon SLE
ISO 15693 (also ISO 18000-3 mode 1)	ATC128-MV ATC256-MV210 ATC256-MV410 ATC1024-MV010 ATC1024-MV110 CTC4096-MM410	Selected types: e.g. EM 4035, Infineon SRF55VxxP, Tag-It HFI
INSIDE Secure (UID only)		INSIDE Secure compliant (based on ISO 15693)
SONY FeliCa subset (NFC Forum Type 3 Tag)		SONY FeliCa NFC P2P target

Attention:

Recommendation by using of Smart Card chips for LEGIC “card in card“ solutions

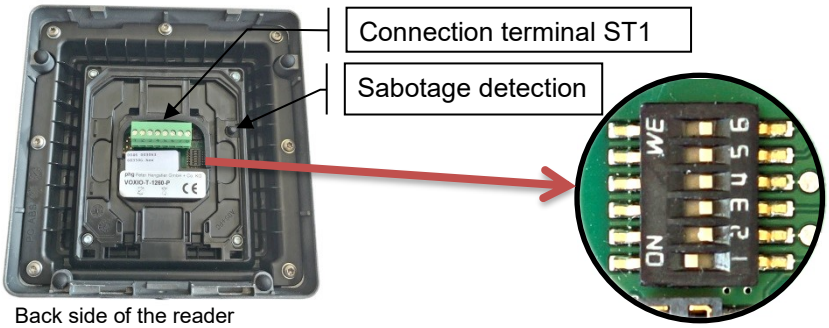
Before use or planned application an aptitude test and functional test of the suitable medium should be carried out.

You receive detailed information about the approach on request.

When required we offer support in the transponder medium analysis as well as the aptitude test and functional test.

Functionally tested transponder media	
Transponder type	**VOXIO-T-1260-S** **Basis LEGIC SM4200M**
LEGIC MIM 256	X
LEGIC MIM 1024	X
LEGIC ATC256-MV410 (ISO 15693)	X
LEGIC ATC2048-MP110 (ISO 14443A)	X
LEGIC ATC4096-MP310 (ISO 14443A)	X
LEGIC ATC4096-MP311 (ISO 14443A)	X
LEGIC AFS4096-JP10/11/12 (ISO 14443A)	X
LEGIC ATC1024-MV010 (ISO 15693)	X
LEGIC ATC1024-MV110 (ISO 15693)	X
LEGIC CTC4096-MP410 (Prime)	X
LEGIC CTC4096-MP410 (ISO 14443A)	X
LEGIC CTC4096-MM410 (Prime)	X
LEGIC CTC4096-MM410 (ISO 14443A)	X
LEGIC CTC4096-MM410 (ISO 15693)	X
Mifare Classic 1k	X
Mifare Classic 4k	X
Mifare DESFire EV1	X
Mifare DESFire EV1 70pF	X
Mifare DESFire EV1 120pF Speed	X
Mifare DESFire EV1 8K	X
Mifare DESFire EV1 8K 70pF Speed	X
Mifare DESFire EV2 4K	X
Mifare DESFire EV2 8K	X
Mifare DESFire EV3 4K	X
Mifare DESFire EV3 8K	X

Pin allocation / Terminal specification / DIP switch



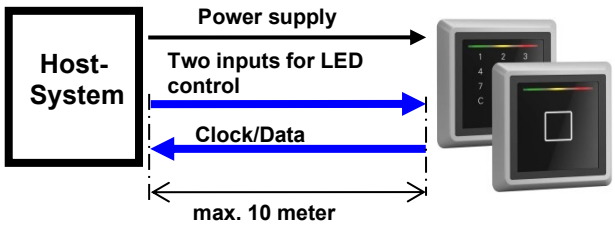
Back side of the reader
with connection terminal

Connection terminal ST1 (8-pole screw-/plug terminal, power supply / interfaces)		
Pin #	**Description**	**Function**
1	RS485 Data "A"	Firmware dependend
2	RS485 Data "B"	
3	Output 1	
4	Output 2	
5	Input 1	
6	Input 2	
7	GND	
8	+Ub (8 to 30V/DC)	
Cable data:		
Stranded wire	AWG 28 – 16	
Solid wire	AWG 28 – 16	
Length of stripped wire 6 - 7 mm		

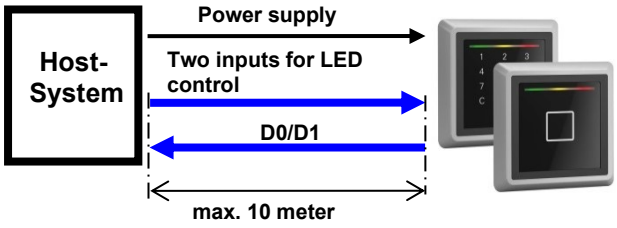
DIP switch (6-fold, S1 to S6) (Device address, Baud rate, terminal bus resistor)	
DIP #	**Function**
S1	Depends on the firmware, e.g. configuration of the reader's address, baud rate, terminating resistor for RS 485
S2	
S3	
S4	
S5	
S6	

Possible configurations

"Magstripe" Clock/Data

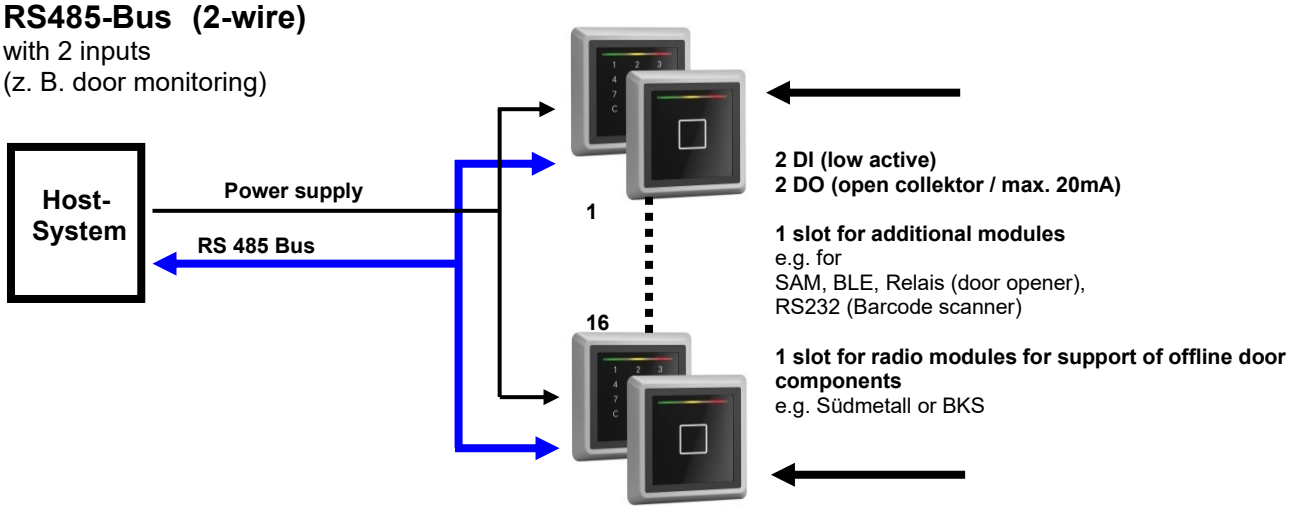


"Wiegand" D0/D1



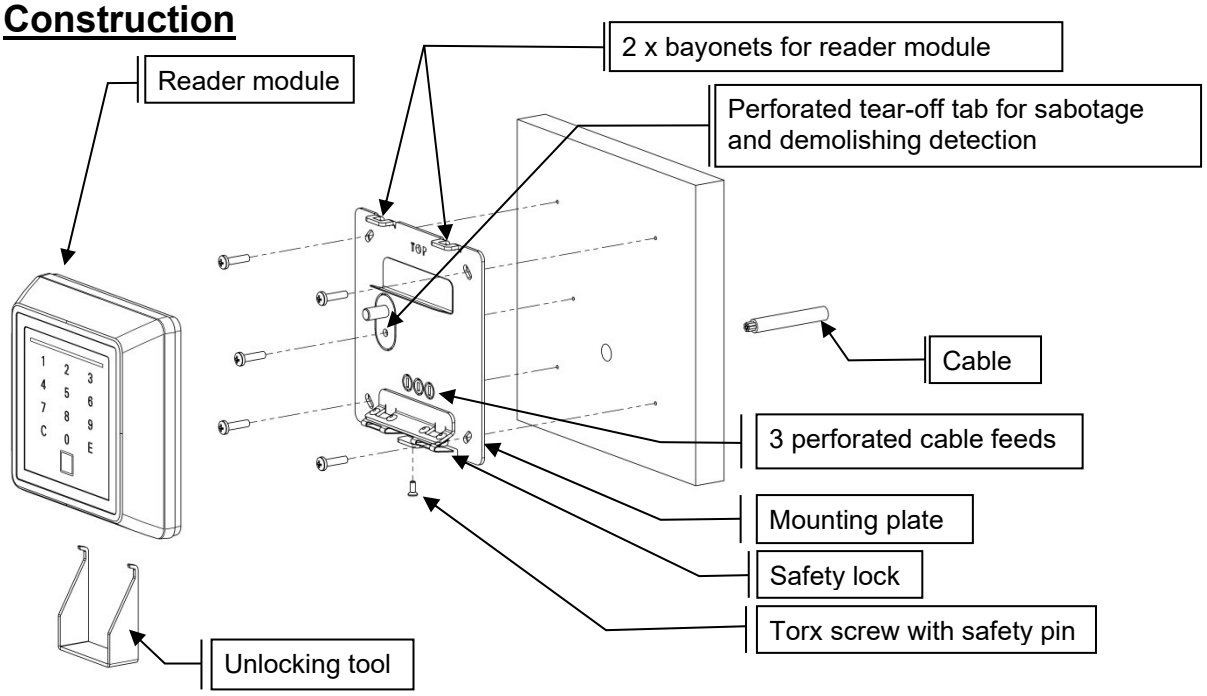
RS485-Bus (2-wire)

with 2 inputs
(z. B. door monitoring)

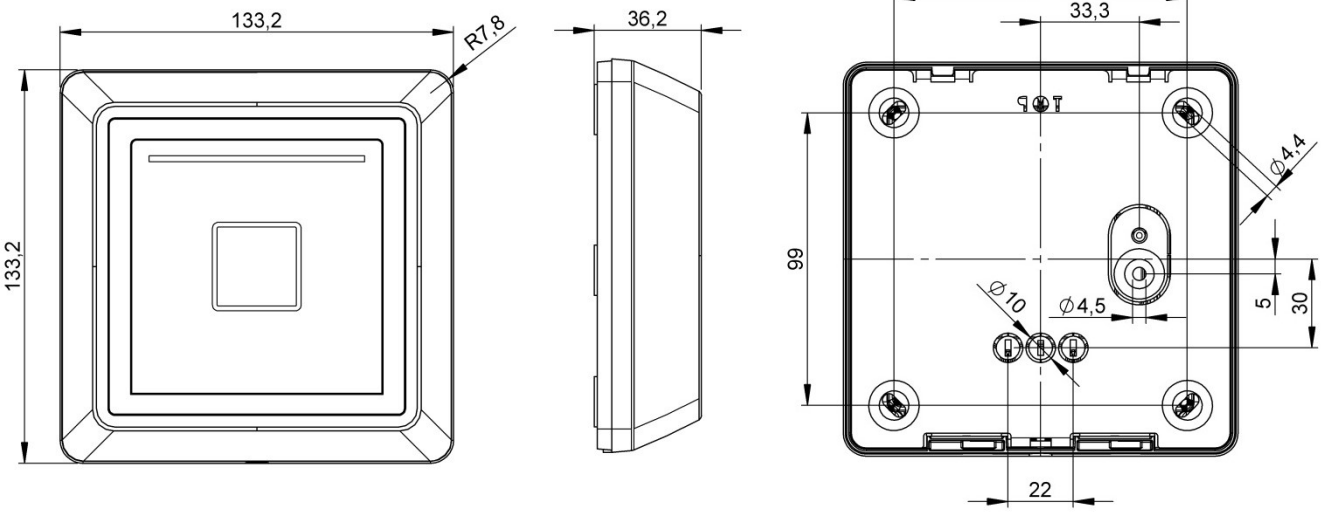


OEM reader module VOXIO

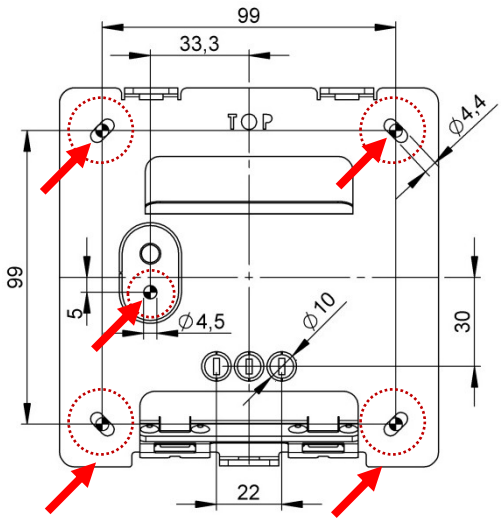
Construction



Dimensions and Drilling



Fixing drills



Fixing on masonry

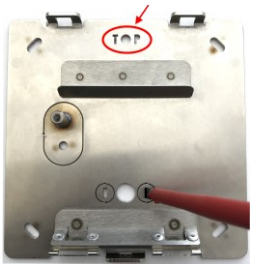
Torx fixing screws included in delivery:
5 pcs / 4 x 60 mm

Recommended dowels:
6 mm

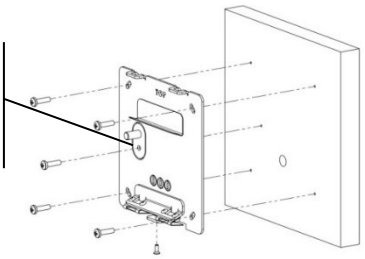
Please use other screw types depending on the material of the wall and the placement

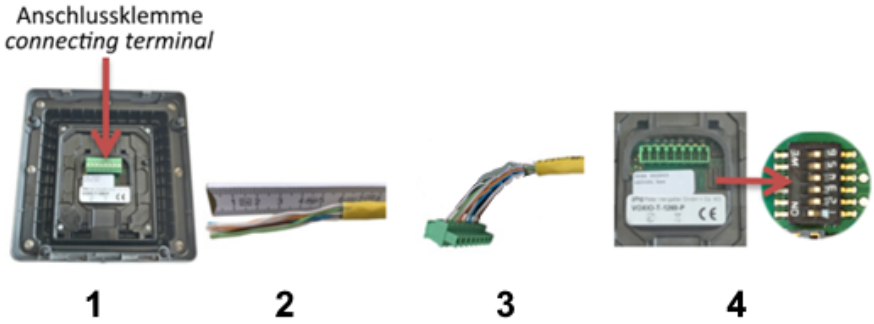
Mounting / Demounting

- Install the connecting cable according to the required mounting type
- For new installations: Unlock the mounting plate by the help of the unlocking tool and remove it from the reader module
- Break the perforated cable feed covers out accoring to the requirement
- Fix the mounting plate by the help of the provided screws



The sabotage detection of the reader is provided if the perforated tear-off tab is fixed with an additional protection screw





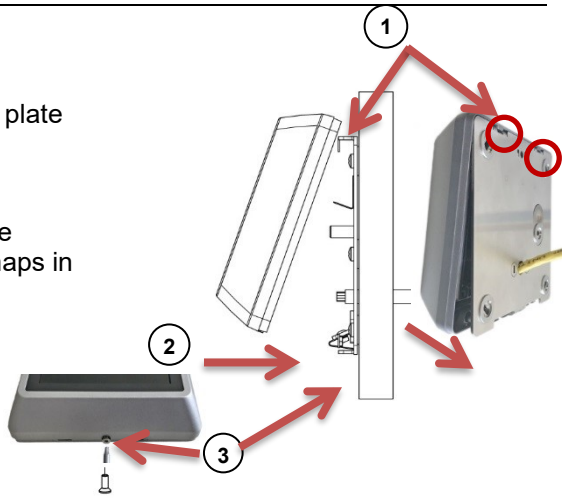
1. Remove the connecting terminal
2. Cut and strip the connecting cable to the correct length (recommendation: 5 to 6 cm)
3. Fix the required strands with the connecting terminal
4. Connect the connecting terminal according to the provided wiring diagram and configure the reader module

The appropriate wiring diagram is provided to each reader module. It also includes the DIP switch configurations

5. Put the connecting terminal into the reader module

Attention ! The wiring of the reader module have to be carried out in a de-energised state, i.e. the supply voltage may be switched on only after the complete assembly

Final assembly and locking of the reader module



1. Put the reader module into the bayonets of the mounting plate

2. Push the mounted reader module in arrow direction to the mounting plate and press strongly until the safety lock snaps in

You hear a clear “click“ at each successful snapping in process

3. Fix the torx screw with the safety pin from below using an adequate tool

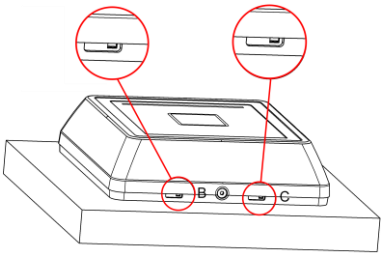
Disassembling of the reader module

Unlock and remove the installed reader at disassembling by the help of the unlocking tool.

Procedure at the unlocking of the safety lock

Unfix the torx screw with the safety pin from below using an adequate tool.

Place the unlocking tool right-aligned and right-angled parallel to the housing of the reader module into the slots (see picture 1 and 2) until the unlocking tool is tight to the housing (see picture 3).



Picture 1

Picture 2

Picture 3

Tilt the unlocking tool back (in direction to the wall, see picture 4). Now press the unlocking tool strongly upwards until the safety lock unlocks. Lift the reader forwards at the same time when pressing upwards (see picture 5)

Picture 4

Picture 5

EG Conformity

The device complies with the essential legal requirements, if used for its intended use.
The EG-Declaration of Conformity can be received on request.

Care and cleaning instruction

The use of hard or sharp objects (rings, fingernails etc.) can cause scratches and damage the device.
Wipe the device with a soft lint-free cloth, or one that has been lightly dampened with water.
The use of caustic liquids such as benzene, thinners, alcohol, solvents, or any kind of abrasive cleaners will lead to surface deterioration and damage.