VOXIO-T (Touch Display)

Interface: RS485

Versions:

Standard	Special feature	RFID Technology
VOXIO-T-1265-D	 capacitive keypad color display 2,8" (320 x 240) / IPS 	Multi-ISO-reader (Basis LEGIC SM4200M)
VOXIO-T-1266-D	 capacitive keypad color display 2,8" (320 x 240) / IPS Touchscreen in the display 	 LEGIC prime/advant MIFARE classic / DESFire / EV1 / EV2 ISO14443 A+B / ISO15693
VOXIO-T-1266-DB	 capacitive keypad color display 2,8" (320 x 240) / IPS Touchscreen in the display Additional privacy protection 	Note: LEGIC Media cannot be initialized

Surface mounted / flush-mounted / with or without capacitive keypad



General Data

Applications

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

Special features

- Capacitive keypad
- available with touchscreen in the display (variant VOXIO-T-1266-D)
- Symbols and numbers backlit
- precious glass designs
- compact design
- Easy to mount
 - Flush-mounting:
 - fits in any device box which is designed for flush or hollow wall mounting, meets DIN requirements and has a distance of 60 mm between the screws
 - Surface mounting:
 - with wall-mounted casing directly on the wall
 - cable can be introduced from above, below or rear
- Sabotage detection
- Dismounting detection (Sabotage report is generated if reader is completely torn from the wall)
- Reading module, wall fixture and wall mounting case are made of plastic
- 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.: 5,0 W typically: 2,8 W
- Temperature ranges:
 storage temperature -30 °C to +70 °C
 operating temperature -20 °C to +60 °C

Signal elements

- Color display 2,8" (320x240) / IPS / adjustable backlight
- 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
- OSDP
- customer-specific on request

Dimensions and weight

- Flush-mounted variant
 - Height 165 mm
 - Width 88 mm
 - Depth 35 mm
- Weight: 235 g
- Surface mounted variant
 - Height 165 mm
 - Width 88 mm
- Depth 38 mm
- Weight: 270 g

Protection class

IP 65 The reader is suited for direct outside mounting

Accessories

• Metal wall-mounted box for customerspecific applications

Individuality VOXIO-T-1266-D

The VOXIO-T-1266-D reader offers additionally a touchscreen in the display. Due to this special feature, a wide range of functions can be flexibly implemented, such as the implementation of additional function keys or a scramble keyboard. The following pictures show these functions as an example.



VOXIO-T-1266-D Touchscreen with function keys F1...F4



VOXIO-T-1266-D Touchscreen with scramble keyboard

Resolution of the touchscreen

The following figure shows the arrangement and size of the individual touchscreen print fields. A higher resolution of the print fields than in the following schematic representation (e.g. 5x5' matrix) is not possible.



We would be happy to advise you if you have any further questions!

Individuality VOXIO-T-1266-DB

With the VOXIO-T-1266-DB you have a reader at your disposal that is characterized by a high security standard. It not only has an additional touchscreen (see previous page) but also an integrated privacy screen in the display (light filter). This ensures that reading the input on the display is excluded from a small viewing angle of $+/-30^{\circ}$.

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\wedge	
/30-30-	
5% 100% 5%	

From an angle of 30 $^{\circ}$ from the front view in all directions (total viewing angle: 60 $^{\circ}$), the light of the display is reduced by approx. 95%.

We will be happy to advise you if you have any further questions!

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.

Hardware platform LEGIC SM 4200 M		
RF Standard	Supported of transponder LEGIC	Supported third-party of transponder **
Standard LEGIC RF	MIM22, MIM256, MIM1024, CTC4096-MP410	
ISO 14443 A (also NFC Forum Type 2/4ATag *)	ATC512-MP, ATC2048-MP, ATC4096-MP, CTC4096-MP410, AFS4096-JP	ISO 14443 part 3/4 compliant: e.g. Infineon SLE, SmartMX Integrated support of MIFARE Ultralight, MIFARE Classic, profit MIFARE and MIFARE DESFire NFC Peer to peer target
ISO 14443 B *** (also NFC Forum Type 4B Tag *)		ISO 14443 part 4 compliant: e.g. InfineonSLE
ISO 15693 (also ISO 18000-3 fashions 1)	ATC128-MV, ATC256-MV, ATC1024-MV	Selected types: e.g. EM 4035, Infineon SRF55VxxP, Tag-It HFI
INSIDE Secure (UID only)		INSIDE Secure compliant
SONY FeliCa subset (NFC Forum Type 3 Tag *)		SONY FeliCa **** NFC Peer to peer target
* Passive fashion, initiator		

** Access with transparent mode (dedicated commands for of transponder MIFARE)

*** If ISO 14443 B of (2001) transponders are used, only one transponders is allowed in the RF field. This restriction does apply to ISO 14443 B of (2008) transponders.

**** The SONY FeliCa protocol is supported according to ISO 18092 (6 bytes preamble). Older FeliCa cards with a shorter preamble are not supported.



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-1265-D VOXIO-T-1266-D Basis LEGIC SM4200M	
LEGIC MIM 256	Х	
LEGIC MIM 1024	Х	
LEGIC ATC256-MV410 (ISO 15693)	X	
LEGIC ATC2048-MP110 (ISO 14443A)	Х	
LEGIC ATC4096-MP310 (ISO 14443A)	X	
LEGIC ATC4096-MP311 (ISO 14443A)	Х	
LEGIC AFS4096-JP10/11/12 (ISO 14443A)	Х	
LEGIC ATC1024-MV010 (ISO 15693)	Х	
LEGIC ATC1024-MV110 (ISO 15693)	Х	
LEGIC CTC4096-MP410 (Prime)	Х	
LEGIC CTC4096-MP410 (ISO 14443A)	Х	
LEGIC CTC4096-MM410 (Prime)	Х	
LEGIC CTC4096-MM410 (ISO 14443A)	Х	
LEGIC CTC4096-MM410 (ISO 15693)	Х	
Mifare Classic 1k	Х	
Mifare Classic 4k	Х	
Mifare DESFire EV1	X	
Mifare DESFire EV1 70pF	Х	
Mifare DESFire EV1 120pF Speed	Х	
Mifare DESFire EV1 8K	Х	
Mifare DESFire EV1 8K 70pF Speed	X	
Mifare DESFire EV2 4K	X	
Mifare DESFire EV2 8K	X	

OEM reader module VOXIO Pin allocation / Terminal specification / DIP switch



Connection terminal ST1 Sabotage 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"	
2	RS485 Data "B"	
3	Output 1	Firmware
4	Output 2	dependend
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, Baudrate, terminal bus resistor)		
DIP #	Function	
S1		
S2	Depends on the firmware, e.g.	
S3	configuration of the reader's address,	
S4	baud rate, terminating resistor for RS	
S5	485	
S6		

Slot for 1 plug-in module

The VOXIO-T series offers the option of connecting an external plug-in module for functional expansion. Depending on the plug-in module used, a correspondingly suitable reader firmware is required.

Optionally, one of the modules listed can be plugged into the socket strip marked in red. The following plugin modules are available:

- 1x radio lock SüdMetall
- 1x relay 1 UM
- 1x RS 232
- 1x SAM



We will be happy to advise you if you have any further questions.

Possible configurations



Construction

Flush-mounting variant



Suface mount variant No. 1: cable entry on the wall through the cut-out in the surface frame



Surface mount variant No. 2: Cable entry through the wall



Surface mount variant No. 3: with additional metal wall-mounted casing

(optional accessories for the assembly of customer-specific applications / electronics)



Dimensions





Flush-mounting variant (with wall mount)



Surface mount variant (with surface frame)

Surface mount variant with surface frame and metal wall-mounted box

Mounting procedure

- Lay the connection terminal according to the required way of mounting
- Push the wall mount / surface frame in arrow direction. Remove it from the reader module and fix them by the help of the provided screws depending on the desired mounting situation





Flush-mounted variant

Fix the wall mount onto a flush-mounted box or a wall. It is recommended to fix the wall mount with at least 6 screws on the wall.



Surface mount variants

Cable entry from top, from below or directly from the wall. Fix the surface frame onto the wall with the screws in the scope of delivery. It is recommended to fix the surface frame with at least 6 screws on the wall.





- 1. Remove the cover cap
- 2. Remove the connecting terminal
- 3. Cut and strip the connecting cable to the correct length (recommendation: 5 to 6 cm)
- 4. Put the required strands through the cable feed duct into the cover cap
- 5. Connect the connecting terminal according to the provided wiring diagram
- 6. Configure the reader module



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

- 7. Put the connecting terminal on the reader module and insert the cover cap
- 8. For protection class IP 65 please seal the cable feed duct by the help of the flexible sealing tape



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 Installation of the wired reader module

Place the connected reader module flat onto the wall mount (1) or the surface frame. During this process the connecting cable with the reader module has to be put back into the flush-mounted box or the surface frame

Press the reader module in direction to the wall and following ່ 2 ` downwards until the reader module snaps into the wall mount or the surface frame

After the successful snapping in please push the locking bar



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on the reader module until it snaps in also.

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



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Disassembling of the reader module

- Unlock the locking bar:
- Put a max. 4 mm screw driver into the unlock openings and press until the locking bar is released
- Pull the unlocked locking bar out forwards and remove it from the reader module
- Push the reader module upwards (snap out)
- Pull the reader module out forwards from the wall mount or the surface frame







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.