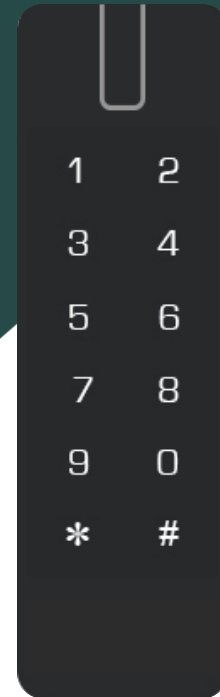


# Smart SE Keypad



## UNIVERSAL READER WITH A KEYPAD

- Mobile credentials
- NFC and Bluetooth Low Energy (BLE)
- Adjustable BLE distance (0.1 - 15 m)
- Mifare Plus SL1/SL3 and Mifare Classic
- Mifare Desfire EV1,2 and EV3
- Supports multiple formats of 125 kHz RFID
- Smartphone adjustable
- Wiegand/OSDP (SIA OSDP Verified)
- Simple and convenient installation
- IP65 degree of protection
- Built-in keypad



The adjustable versatile SmartLine second edition (SE) reader for mobile credentials and proximity identifiers in conjunction with the U-Prox Mobile ID application and U-Prox BLE IDs will allow any access control system to use smartphones as access system credentials.

## U-Prox BLE ID

Digital personal mobile credential. It is processed and stored in the user's smartphone using the U-Prox Mobile ID application. It can be transferred over NFC and/or BLE between the reader and the smartphone.

via **NFC** for Android only

Read range 2-5 cm. Recommended for double-sided doors and turnstiles.

via **BLE** for Apple and Android

Reader supports 3 operation modes for smartphones with U-Prox ID:

- "Door-Proximity" - 10-20 cm, reader activates by built-in IR sensor. Recommended for double-sided doors and turnstiles
- "Door" - up to 60-70 cm
- "Barrier/Gate" - adjustable range of interaction from 1 to 15 m.

## Mifare® и Mifare® Plus

Operates with ISO14443A identifiers, supports SL1 and SL3 modes for Mifare®Plus. Read range — up to 5 cm.

Reads encrypted identifiers with static or diversified key and with an arbitrary card number.

Simultaneous use of five encryption profiles.

## RFID, 125 kHz

Supports RFID 125 kHz - EmMarine and other formats.

## Keypad

Reader transmits keypad codes in one of the programmed modes — package (after the '#' key press) or digit-by-digit (4 or 8 bits per symbol).

## Easy connection

Seamless and easy connection to existing and new access systems, due to the OSDP, Wiegand 26, 32, 34, 37, 40, 42, 56, 58, 64 bit interfaces, Wiegand with automatic selection, RS232 and TouchMemory supports.

## Integration

OSDP or RS-232 protocols for integration into arbitrary systems. The encrypted OSDP protocol provides safe management of all parameters of the reader including credential encryption keys from the panel.

## Mobile Apps

Free mobile application **U-Prox Mobile ID** receives, stores and transmits mobile credentials U-Prox BLE ID between the reader and the smartphone.




With the free mobile application **U-Prox Config**, the reader can be completely adjusted — from the indication to the encryption modes.



The reader is supplied without the engineering password for programming specified. To connect and (re) set the password — connect inputs D0 (green) and D1 (white) with each other and apply power to the reader.

**Warning!!! The reader firmware can be updated with an NFC-enabled Android smartphone only.**

## Benefits

<b>Read range</b>	NFC, Mifare and RFID 125 kHz - up to 5 cm, 2.4 GHz radio - adjustable 10 cm - 15 m
<b>Mifare®, 13.56 MHz</b>	ISO14443A: Mifare® Standard, Mifare® Hi-Memory, Mifare® Ultralight, Mifare® Classic 1K/4K, Mifare® Classic 7UID, Mifare® Plus SL1 and SL3, Mifare Desfire EV1,2 and EV3
<b>NFC, 13.56 MHz</b>	ISO 14443/15693
<b>RFID, 125 kHz</b>	ASK and FSK
<b>Case material</b>	ABS+PC plastic
<b>Color</b>	black
<b>Dimensions</b>	42.8 x 157.8 x 16 mm
<b>Weight</b>	120 g
<b>Ambient</b>	IP65, -40°C ... +60°C
<b>Power supply</b>	+9...+15 VDC, max current- up to 90 mA Voltage ripple - up to 500 mVp-p
<b>Interfaces</b>	OSDP  , Wiegand 26, 32, 34, 37, 40, 42, 56, 58, 64 bits, Wiegand Auto, RS232 and TouchMemory
<b>Wiring</b>	8 wire cable, maximum distance to panel - up to 150 m for Wiegand interface, up to 30 m for TouchMemory interface, up to 1000 m for OSDP
<b>Keypad</b>	Built-in, wireless. Programmable modes - package (after the '#' key press) or digit-by-digit (4, 6 or 8 bits per symbol).

## Wiring

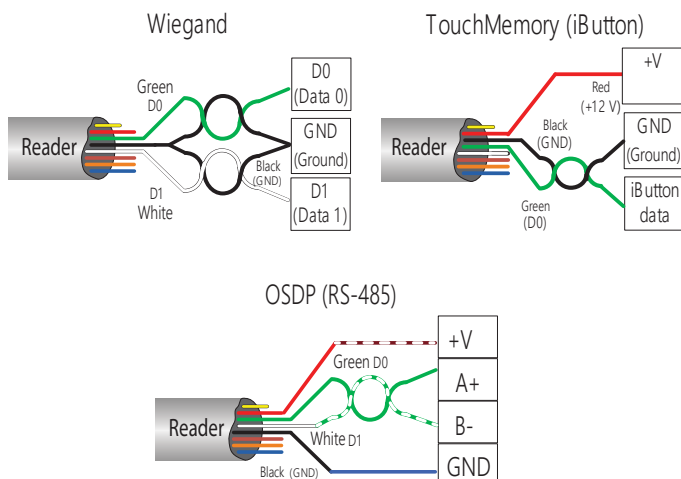
The reader connection wires functions are listed in the table. We recommend to use multi-core signal cable with 0.22 mm<sup>2</sup> cross-section of each wire between reader and panel.

Color	Wiegand	RS232	TouchMemory	OSDP
Green	Data0 (WD0)	Rx	iButton	A+
White	Data1 (WD1)	Tx		B-
Red	+V, 12 VDC			
Black	GND			
Brown	Red Led		Red Led	
Orange	Green Led		Green Led	
Blue	Beep		Beep	
Yellow	Hold/Sync	Hold/Sync	Hold/Sync	

Reader turns to the hold mode while yellow wire is shorted to ground and does not read any identifiers.

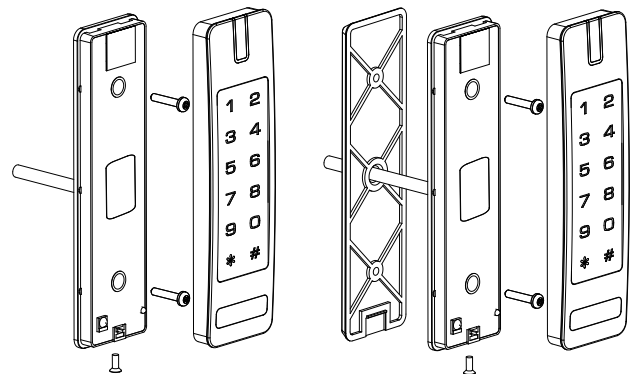
It is prohibited to supply the external voltage to the yellow wire!

Reader connection to the panel with twisted pair.



## Reader Installation

Installation on the metal surfaces without the supplied plastic wafer may cause decrease of reading range. Do not place readers closer than 20 cm one from another. It is possible to install two readers at a distance 10-15 cm of each other when their yellow wires (Hold/Sync) interconnected. This synchronizes the work of the readers, they will work alternately.



1. Make small recess or hole (diameter is 14 mm) to connect cable under the reader's case
2. Loosen the screw at the bottom of the reader
3. Remove the top cover
4. When mounting on a metal surface, use the plastic wafer
5. Carry out wiring to the control panel
6. Fasten the reader to the wall, using supplied plastic dowels and screws
7. Place the top cover and tighten it with a screw

### Limited Warranty

Manufacturer warrants that for a period of thirty six months from the date of purchase, the product shall be free of defect in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Integrated Technical Vision Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not damages incurred in shipping or handling, or damages due to causes beyond the control of Manufacturer such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original buyer, and is and shall be lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Manufacturer. This warranty contains the entire warranty. Manufacturer neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any warranty or liability concerning this product.

In no event shall Manufacturer be liable for any direct, indirect or consequential damages. Loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.