

# Astuto Mini Reader

- Astuto encrypted format - 128-bit AES
- Mobile credentials
- NFC and Bluetooth Low Energy (BLE)
- Adjustable BLE distance (0.1 - 12 m)
- Wiegand interface
- Simple and convenient installation
- IP65 degree of protection

AST9053



The Astuto mini reader for mobile credentials and proximity identifiers in conjunction with the Mobile ID application and BLE IDs will allow any access control system to use smartphones as access system credentials.

## BLE ID

Digital personal mobile credential. It is processed and stored in the user's smartphone using the 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 BLE ID:

- "Door-Proximity" – 10-20 cm, reader activates by built-in proximity sensor. Recommended for double-sided doors and turnstiles
- "Door" - up to 60-70 cm
- "Barrier/Gate" - adjustable range of interaction from 1 to 12 m.

## Easy connection

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

## Mobile Apps

Free mobile application **Mobile ID** receives, stores and transmits mobile credential BLE ID between the reader and the smartphone.



Made in Ukraine.

# ASTUTO

# Specifications

<b>Read range</b>	NFC, and RFID up to 5 cm, BLE - adjustable 10 cm - 12 m
<b>BLE (Bluetooth Low Energy), 2,45 GHz</b>	Bluetooth 4.x, Bluetooth 5.x
<b>Transmit Frequency</b>	13.56 MHz
<b>Encryption</b>	128-bit AES
<b>Case material</b>	ABS+PC plastic
<b>Color</b>	black, light-gray
<b>Dimensions</b>	45 x 80 x 12.5 mm
<b>Weight</b>	70 g
<b>Ambient</b>	IP65, -40°C ... +60°C
<b>Power supply</b>	+9...+15 VDC, max current- up to 80 mA Voltage ripple - up to 500 mVp-p
<b>Interfaces</b>	Wiegand 26 (default configuration), 32, 34, 37, 40, 42, 56, 58, 64 bits
<b>Wiring</b>	8 wires cable, maximum distance to panel - up to 150 m for Wiegand interface,
<b>Warranty</b>	Limited Lifetime

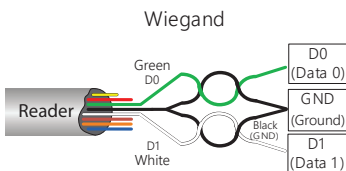
## Wiring

The reader terminal functions are listed in the table. We recommend to use multi-core signal cable with 0.44 mm<sup>2</sup> cross-section of each wire between reader and panel.

Color	Wiegand	RS232	
Green	Data0 (WD0)	Rx	
White	Data1 (WD1)	Tx	
Red	+V, 12 VDC		
Black	GND		
Brown	Red Led		
Orange	Green Led		
Blue	Beep		
Yellow	Hold	Hold	

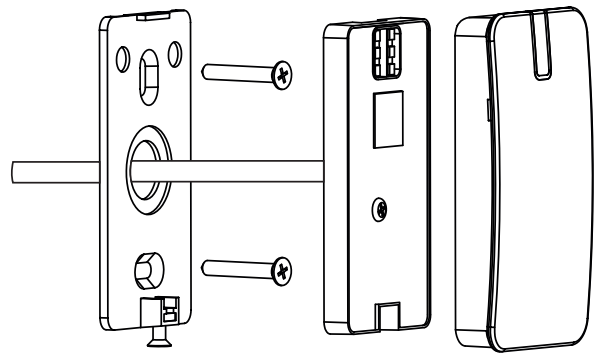
Reader turns to the hold mode while yellow wire is shorted to ground and does not read any identifiers. It is prohibited to supply the external voltage to the yellow wire!

Reader connection to the panel with twisted pair.



## Reader Installation

Installation on the metal surfaces 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.



0. Make small recess or hole (diameter is 14 mm) to connect cable under the reader's case.
1. Loosen the screw at the bottom of the reader.
2. Remove the top cover, remove the back plate.
3. Mount the back plate of reader on the wall using supplied plastic dowels and screws.
4. Connect reader with cable, which attaches it to control panel.
5. Insert the reader in the back plate
6. Place the top cover and tighten it with a screw