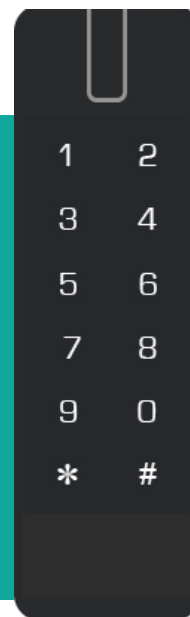


# ASTUTO

## Astuto RAPID Keypad Reader

AST9055-R

- Astuto encrypted format: 128-bit AES
- Accepts Mobile Credentials
- Supports NFC (Near Field Communications ) & BLE (Bluetooth Low Energy)
- Adjustable BLE distance (10 cm - 12 m)
- Wiegand interface
- Simple and convenient installation
- IP65 ingress protection rating
- Build-in Keypad
- Pre-programmed, off the shelf solution



The Astuto RAPID keypad reader accepts mobile and physical proximity credentials. When used in conjunction with the U-Prox Mobile ID App and Mobile credentials, it will allow any access control system to use smartphones as credentials.

### MOBILE CREDENTIALS

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 Mobile 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 control systems, due to the Wiegand 26, 32, 34, 37, 40, 42, 56, 58, 64 bit interfaces, with automatic selection and TouchMemory support.

### Mobile Apps

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

### Warranty

Limited lifetime.



MADE IN EUROPE.

[astutoaccess.com](http://astutoaccess.com)

## Specifications

<b>Read range</b>	NFC, and RFID up to 5 cm, BLE - adjustable 10 cm - 12 m
<b>BLE 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
<b>Dimensions</b>	42.8 x 157.8 x 16 mm
<b>Weight</b>	120 g
<b>Operating Environment</b>	Ambient temp. range -40°C to +60 °C - IP 65 protection rating
<b>Power supply</b>	9 TO 15VDC, max current- up to 90 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 wire cable, maximum distance to panel 150 m for Wiegand interface
<b>Warranty</b>	Limited Lifetime
<b>Approvals</b>	RCM - AS/NZS 4268: 2017, EN 300 328 V2.1.1 (2016-11), EN 300 330 V2.1.1 (2017-02), EN 55032:2015, CE

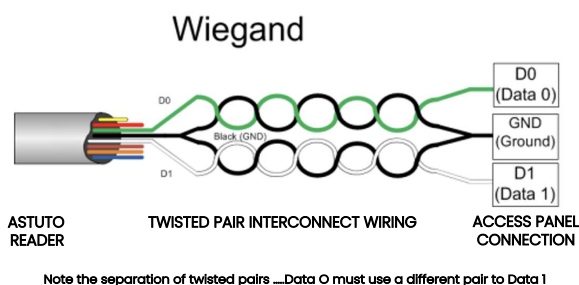
## Wiring

The reader terminal functions are listed in the table. We recommend the use of 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	+12V DC	
Black	GROUND	
Brown	Red Led	
Orange	Green Led	
Blue	Beep	
Yellow	Hold	Hold

Reader turns to hold mode when yellow wire is earthed and does not read any credentials. This allows the access control panel to manage the operation of the reader.

**DO NOT CONNECT THE YELLOW WIRE TO POWER.**

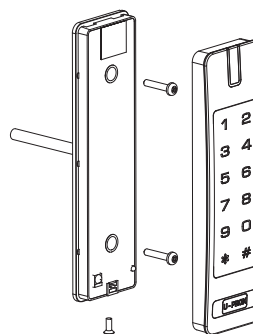


## Reader Installation

Installation on metal surfaces may cause a 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) are interconnected.

This synchronizes the operation of the readers, allowing them to operate alternately.



1. Make a small hole in the mounting surface (base opening diameter is 14 mm) to connect cable through the reader's back plate/case.
2. Loosen the screw at the bottom of the reader.
3. Remove the top cover, remove the back plate.
4. Mount the back plate of reader on the wall using supplied plastic wall plugs and screws.
5. Connect reader with cable which attaches it to the control panel.
6. Insert the reader onto the back plate.
7. Replace the top cover and secure it with the screw at bottom of the reader.