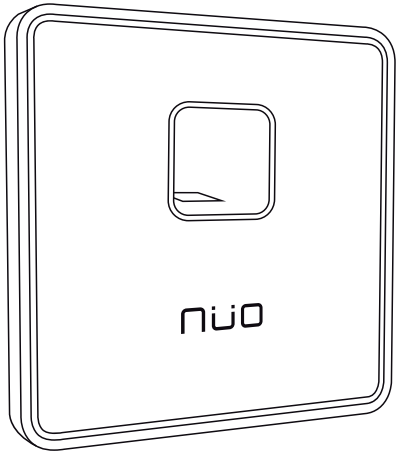


Manual

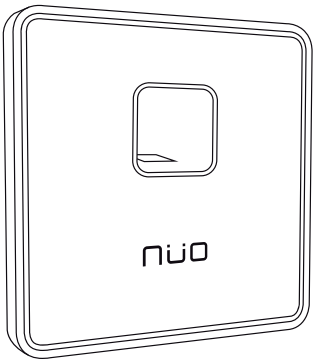
NÜO AWA

42222 | 42294

GENERAL FEATURES

NÜO AWA (Ref. no. 42222 and 42294)

- Biometric reader with optical fingerprint sensor and multi-spectral imaging technology.
- Identifies up to 1,000 users
- Maximum security proximity reader for contactless MIFARE Plus® and NFC cards.
- Proximity card reader from a distance of 3 to 4 cm.
- Acoustic-light indicators to show when the credentials have been granted or denied access, in addition to the reader operating mode (fingerprint only, card only, fingerprint or card, etc).
- Assembled in an embedded case using a screw-less hidden fastener with an automatic interlock.
- IP65 protection and IK07 impact ratings.
- Optional stainless steel casing for surface mounting.



REGULATIONS

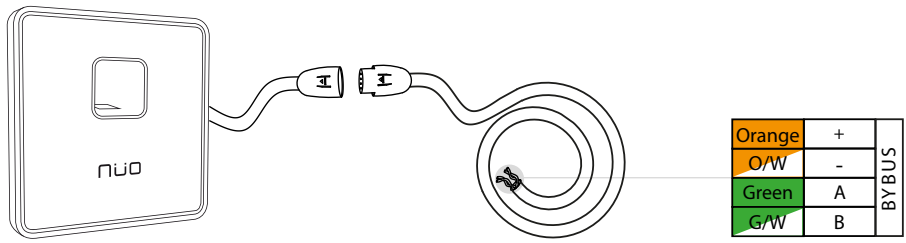
ISO 14443 A and B - NFC MIFARE Emulation
MIFARE Plus ® EV1 Certification: Common Criteria EAL5+ (CC EAL5+)
MIFARE Plus ® EV1 data authentication and encryption: AES128 NIST FIPS PUB 197
Bluetooth® Smart v4.0
EN 60950-1, EN 301 489-1, EN 301 489-3, EN 300 330, EN 62479, EN 50364

CE

TECHNICAL SPECIFICATIONS	
NÜO PASS:	
INPUT VOLTAGE	24 VDC
STAND BY POWER	2.8 W - 100 mA
MAXIMUM POWER	3.9 W - 140 mA
READING DISTANCE	3 - 4 cm
FINGERPRINT SENSOR TYPE	Multispectral
SENSOR RESOLUTION	500 dpi 300 x 400 Pixels
MAX. NO. FINGERPRINTS	1,000 to 10,000 (with DC1+BIO controller)
COMMUNICATIONS	BYBUS RS-485 Full-Duplex
BLUETOOTH®	Fully Low Energy BLE compliant, Smart v4.0
INDICATORS	Lights automatically regulated according to environment. Different colours and sounds according to status. - Red/White: Terminal offline. - Degraded Red/Pink: Terminal in card enrolment mode. - Flashing blue: Terminal in firmware update mode. - Blue: Terminal on standby. - Green: Access granted. - Red: Access denied. - White: Card writing operation.
OPERATING TEMPERATURE	-10ºC to 60ºC
READER DIMENSIONS	Height 114 mm, width 114 mm, depth 62 mm

TYPE OF WIRING AND WIRING DISTANCE:

The NÜO AWA reader incorporates a male overhead connector.
NÜO AWA is supplied with a 3.5 metre piped cable with 4 wires (2 twisted pairs) and a female connector at one end to correctly connect it.
The other end of the piped cable is connected to a single door controller or to the corresponding Wili following the simple colour coding.



NÜO AWA

3.5 metres of cable

The wiring distance from the reader and the single door controller or Wili should not exceed 25 metres in length under any circumstances.

WIRING SPECIFICATIONS:

The built-in piped cable used to connect the reader has the following technical characteristics:

- Gauge: 0.22 mm
- Arrangement: 2 twisted pairs
- Resistance: <2 Ohms

DISTANCE BETWEEN READERS:

A minimum distance of 12 cm must be maintained for installations using doors with 2 input/output readers or if there are 2 readers that are very close together.

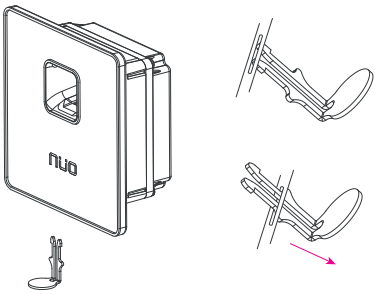
Installation > NÜO AWA >

FLUSH MOUNTING

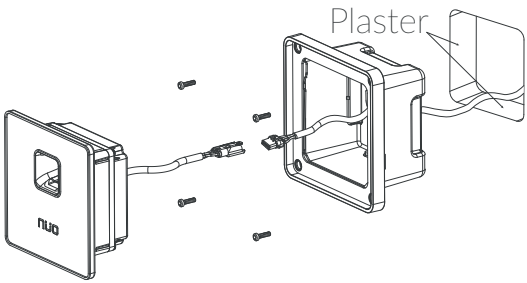
The NÜO AWA reader can be flush mounted in various environments.

Follow the detailed instructions below to install it correctly:

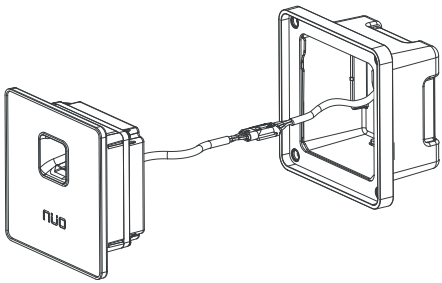
1) Remove the reader from the flush mount support using the detachable clip.
Insert the clip and pull down.



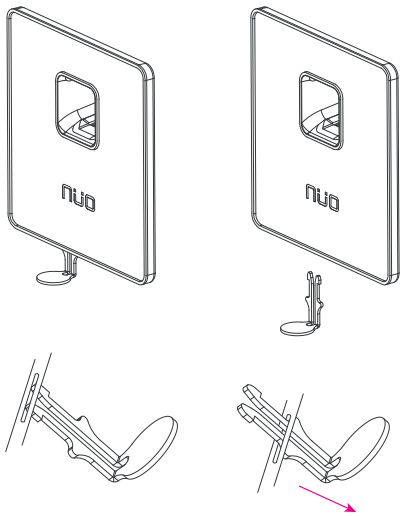
2) Using a level, make a hole in the wall measuring 92 x 92 mm and 51 mm deep. Pass the connecting cable through and grout the hole.



3) Insert the flush mount support and connect the assembly.

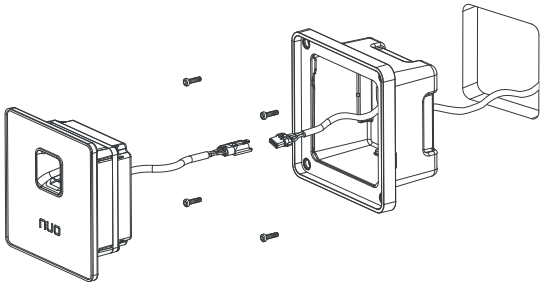


4) Insert the reader module into the flush mount support using the detachable clip.
Insert the clip and pull down.



5) Fit the reader module and remove the detachable clip.

To flush mount the reader into a plasterboard wall, the support should be screwed using CL82Z-3.1 x 16 countersunk screws (NOT INCLUDED).

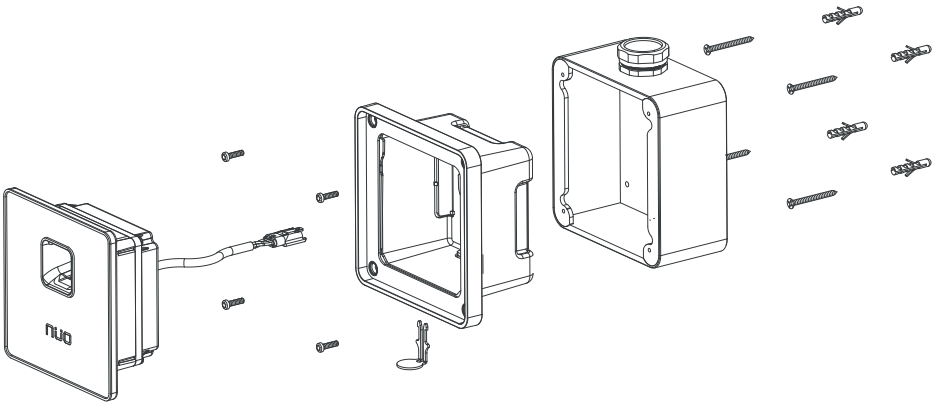


SURFACE MOUNTING

The NÜO AWA reader can be surface mounted by using the surface support kit.

The assembly instructions are as follows:

1) Mark the position of the 4 screws used to fasten the surface support to the wall.
2) Drill and place the wall plugs for the screws. Screws should have a diameter of 3.5 mm and a minimum length of 25 mm (included).
3) Fasten the surface support to the wall.
4) Remove the reader from the surface support (see instructions for flush mounting).
5) Insert the flush mount support into the surface support.
6) Fasten the flush mount support to the surface support using the screws provided.



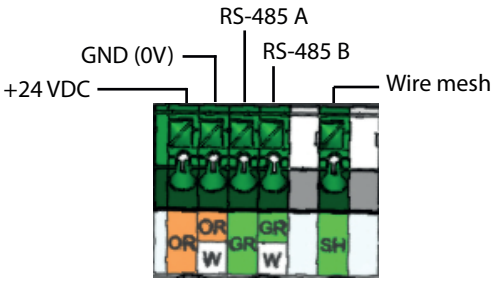
Once the reader module has been fastened to the wall, use the suction cup provided and the detachable clip to remove it.

WIRING

NÜO AWA readers can be directly connected to two types of devices depending on the architecture of the installation:

- Connection to a Wili
- Connection to a single door controller

The connection to be made for both types of devices is exactly the same. The colour code must be followed. For more detailed information, consult the equipment manuals referenced earlier.



READER WIRING:

COLOUR	SIGNAL	
Orange	+ 24VDC	BYBUS
Orange/White	0V / GND	
Green	RS-485-A	
Green/White	RS-485-B	

Install and connect the reader before powering the system.

NÜO readers use the 24 VDC input voltage corresponding to the controller equipment to which they are connected, the power sources of which are rigorously prepared for such purpose.

These signals must be perfectly isolated in order to prevent damaging the equipment or installation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipmentÿ

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

FCC ID: 2ARQ3-MTA42222

By TechDesign SL

Model name: Door control system
Model No.: MTA 42222
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.