

User manual

NÜO SURF
41761 | 42054

GENERAL FEATURES	
NÜO FLUX (ref. no.: 42054 and 41761)	
- Maximum security proximity reader for contactless MIFARE Plus® and NFC cards. - Reader status indicated via acoustic-light display. - Communication encrypted with AES AND 3DES encryption algorithms. - Operating temperature from -10 °C to 50 °C for indoor installations. - References according to black and white model: - White: 42054 - Black: 41761	 NÜO SURF 41761 42054

REGULATIONS
ISO/IEC 14443 A and B.
AES128 NIST FIPS PUB 197 MIFARE Plus EAL4+ Common Criteria certification.
NFC MIFARE emulation compliant.
EN 60950-1 2001 and A1: 2004.
EN 300 330-2 v1.3.1.





TECHNICAL SPECIFICATIONS

NÜO SURF:

INPUT VOLTAGE	24VDC
STAND BY POWER	0.9 W - 32 mA
MAXIMUM POWER	1.8 W - 66 mA
CPU	32-bit ARM Microprocessor
READING DISTANCE	4-6 cm
COMMUNICATIONS	BYbus RS-485
SECURITY	Dynamic encryption
CONNECTION	IP67 connector + 3.5 m ByBus 2 cable
ALARM	2 sound levels incorporated for granted access and denied access.
ILLUMINATION	Automatically regulated according to environmental conditions. Colours 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.
MATERIALS	Manufactured with the highest quality polycarbonate with ultra-resistant tempered glass facing
TYPE OF INSTALLATIONS	Surface mounted
ENVIRONMENTAL PROTECTION	Indoor installation IP54
IMPACT RATING	IK07
OPERATING TEMPERATURE	-10 °C to 55 °C



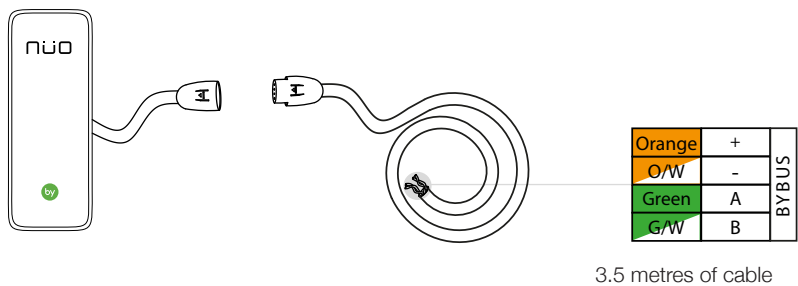
TECHNICAL SPECIFICATIONS

READER DIMENSIONS	120 x 46 x 20 mm (height x width x depth)
ACCESSORIES	- Wall mount for reader - Bag with accessories: - Screws and wall plugs for surface mounting.

Installation >> NÜO SURF >

TYPE OF WIRING AND WIRING DISTANCE:

The NÜO FLUX readers incorporate a 4-pin male overhead connector and the corresponding female connector which joins 3 metres of piped cable with 4 wires (2 twisted pairs). This means that the installation and wiring to then connect the reader to a single door controller or to the corresponding Wili are both very simple.



NÜO SURF



The wiring distance from the reader and the single door controller or Wili should not exceed 15 metres in length under any circumstances.

WIRING SPECIFICATIONS:

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

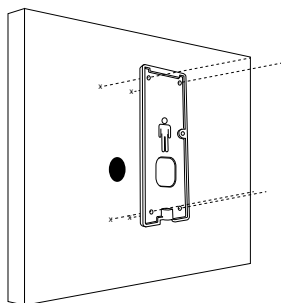
- Gauge: 0.22 mm
- Arrangement: 2 twisted pairs
- Resistance: <2 Ohms
- Capacitance, core to earth: < 160pF/m
- Capacitance, core to core: < 100pF/m

DISTANCE BETWEEN READERS:

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

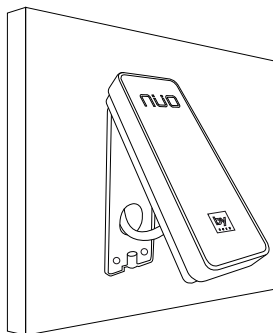


1) Anchor base to wall, levelled. To do this, mark the location of support holes and drill at the diameter corresponding to the wall plugs provided. Do not forget to pass the power and communication cables through:

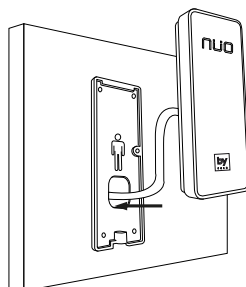


The head of the figure in the drawing should be pointing up.

3) Angle the reader at about 45 °C to fit the tab in the upper part of the reader into the wall base:

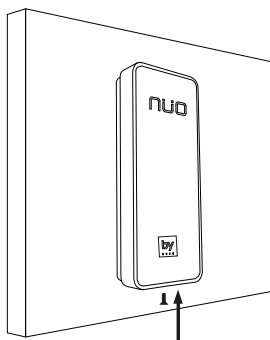


2) Pass the reader connection cable through the hole made for such purpose:



Recommended height for installation is between 1.2 and 1.5 m.

4) Place the reader wholly within its base and set the anchoring screw located in the lower part:

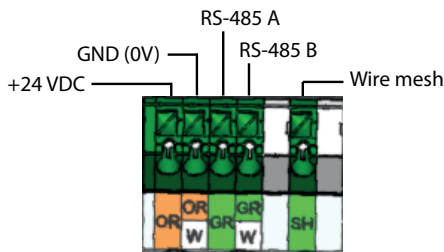


Installation >> Wiring >

NÜO SURF 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.



Connector for NÜO readers in SDU and single-port controllers

READER WIRING:

COLOUR	SIGNAL	BYBUS
Orange	+ 24VDC	
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, and whose power sources are rigorously prepared for this 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 equipment.

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-MTA41761**By TechDesign SL**

Model name: Door control system

Model No.: MTA 41761

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.