TEST REPORT

Name of product: IP audio and video door intercom
Type of product: 2N® Helios IP Verso modules:
- 9155101 - 2N® Helios IP Verso basic unit (without camera)
- 9155101C - 2N® Helios IP Verso basic unit with camera
- 9155035 - 2N® Helios IP Verso 5 buttons
- 9155031 - 2N® Helios IP Verso keypad
- 9155033 - 2N® Helios IP Verso RFID card reader 13 MHz
- 9155034 - 2N® Helios IP Verso I/O module
- 9155037 - 2N® Helios IP Verso Wiegand module
- 9155013 - 2N® Helios IP Verso Frame for flush installation, 3 modules
- 9155016 - 2N® Helios IP Verso Box for flush installation, 3 modules
- 9155022 - 2N® Helios IP Verso Frame for surface installation, 2 modules

 Ratings:

 Serial number:

 Manufacturer: 2N TELEKOMUNIKACE a.s.,
 Modřanská 621/72, 143 01 Praha 4,
 Czech Republic

 Production site: 2N TELEKOMUNIKACE a.s.,
 Modřanská 621/72, 143 01 Praha 4,
 Czech Republic

 Ordering firm: 2N TELEKOMUNIKACE a.s.,
 Modřanská 621/72, 143 01 Praha 4,
 Czech Republic

 Number of tested samples: 2
 Samples submitted on: 11. 11. 2015
 Location of testing: EZÚ
 Tested from: 12. 11. 2015 through 19. 11. 2015
 Other data: -

 The product was tested according to: ČSN EN 60529:1993+A1:2001+A2:2014

 Compiled by: Josef Šašek
 Approved by: Jiří Bažant
 Testing laboratory technical manager

Test results stated in the test report apply only to the tested subject and unless specified otherwise in the test report, the tests were performed using the method and under the conditions determined in the test regulations, technical norm, instructions for use and information provided by the manufacturer on the tested subject and using accessories required by the manufacturer. Without written consent, this report must not be reproduced in any other way than as a whole.

Phone: +420 266 104 111 Fax: +420 284 680 070 www.ezu.cz
1. Specimen description

Two sets of IP audio and video door intercom 2N® Helios IP Verso for surface and flush installation were provided for testing.

The sets consist of following modules:

<table>
<thead>
<tr>
<th>Code</th>
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</tr>
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Fig. 1 - the specimen - surface installation set
Fig. 2 - the specimen - flush installation set
2. Testing

2.1 Tests of protection provided by enclosures

2.1.1 Test of protection against penetration of dust - IP 5X

Test apparatus:
dust chamber VST 1150, inv. No. 834490

Test parameters:
The specimens were tested in an operating position.
specimens after the test: see Fig. 3
dust filling of the chamber: talc
temperature / relative humidity during the test: 55 °C / 30 %
depression: no depression
duration of test: 8 h

Findings:
During the test, no dust penetrated into protected space of the specimens.

passed
2.1.2 Test of protection against splashing water - IP X4

Test apparatus:
spray nozzle model 6600, inv. No. 110268
stopwatch SECCO, cal. No. N700477

Test parameters:
The specimens were tested in an operating position.
testing: see Fig. 4
spray angle: up to 180° from vertical
water flow rate: 10 l·min⁻¹
duration of test: 5 min

Findings:
During the test, no water penetrated into protected space of the specimens.

![Fig. 4 - IP X4 testing (the specimen for surface installation)]
3. Photodocumentation - design of the specimen

Fig. 5 - outer frame sealing (the specimen for flush installation)

Fig. 6 - placement of the modules in the inner frame (the specimen for flush installation)
Fig. 7 - module 9155101C without covers

Fig. 8 - module 9155035 - sealing of the buttons
4. Test result

The submitted sets of

**IP audio and video door intercom 2N® Helios IP Verso**

_satisfy_


 Tested by: J. Šašek

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end of Test Report