



ELECTROTECHNICAL TESTING INSTITUTE
Pod Lisem 129
171 02 Praha 8 - Troja

No. of pages: 8
No. of annexes/No. of an. pages: 0/0

No. of the Test Report: 503914-01/01

Issued: 10. 12. 2015



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:

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



Fig. 1 - the specimen - surface installation set

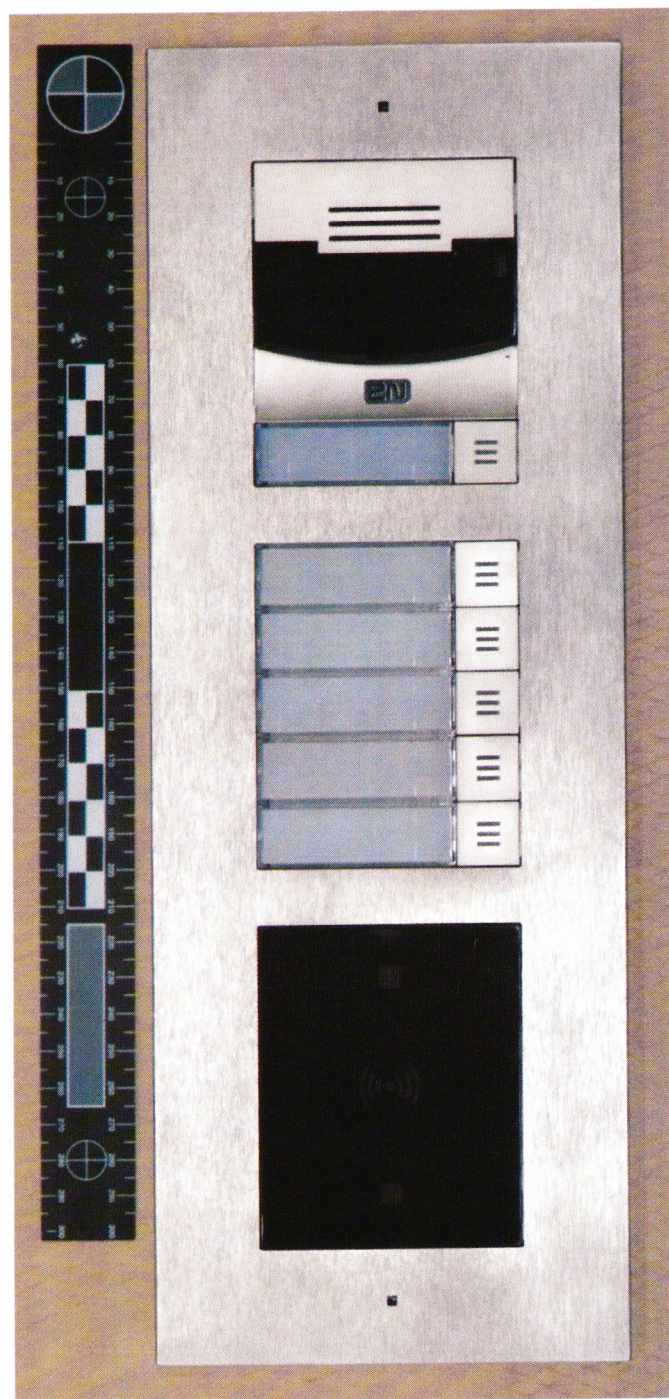


Fig. 2 - the specimen - flush installation set

2. Testing

2.1 Tests of protection provided by enclosures

according to ČSN EN 60529:1993 +A1:2001 +A2:2014

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

according to ČSN EN 60529:1993 +A1:2001 +A2:2014, cl. 13.4 and 13.5

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

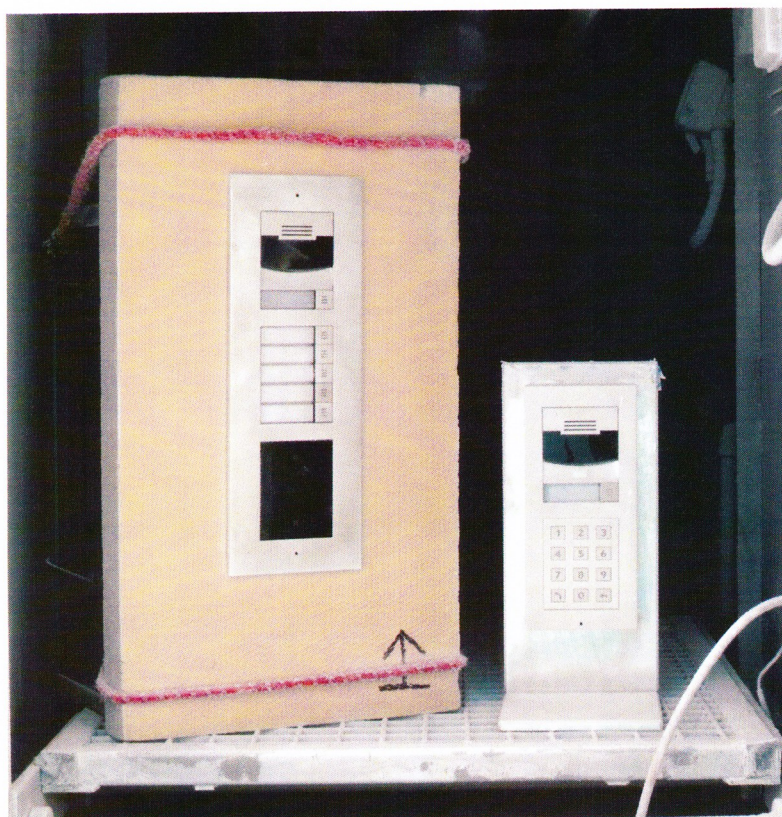


Fig. 3 - specimens after IP 5X test

2.1.2 Test of protection against splashing water - IP X4

according to ČSN EN 60529:1993 +A1:2001 +A2:2014, cl. 14.2, 14.2.4 and 14.3

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.

passed



Fig. 4 - IP X4 testing (the specimen for surface installation)

3. Photodocumentation - design of the specimen

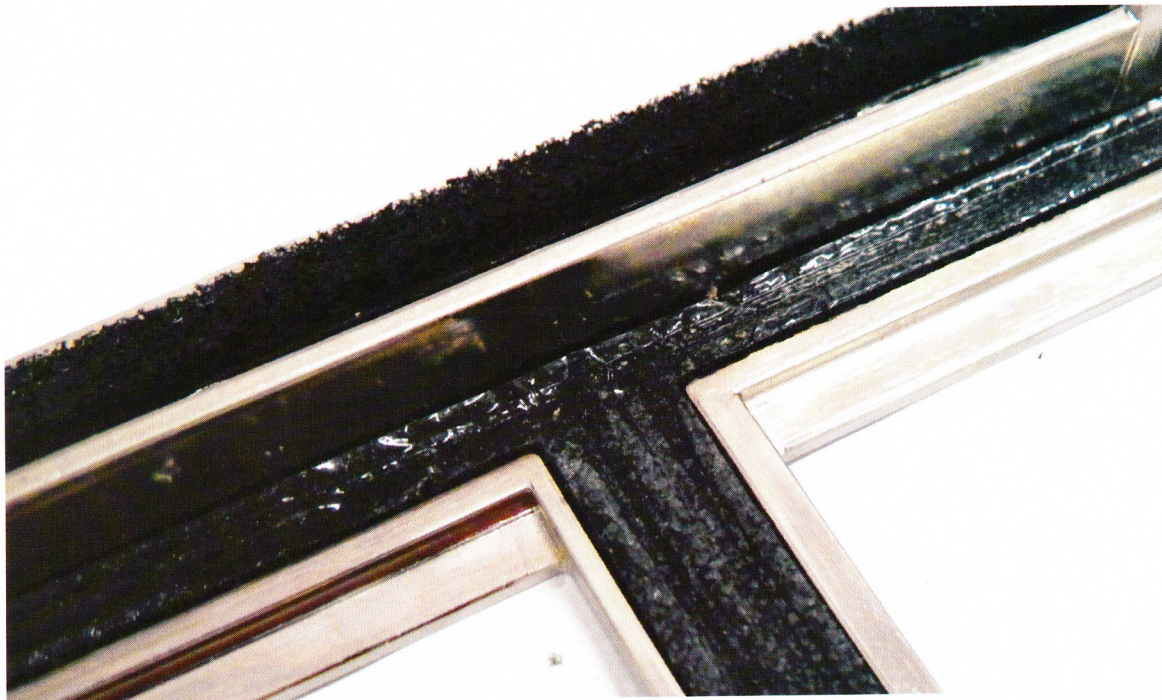


Fig. 5 - outer frame sealing (the specimen for flush installation)

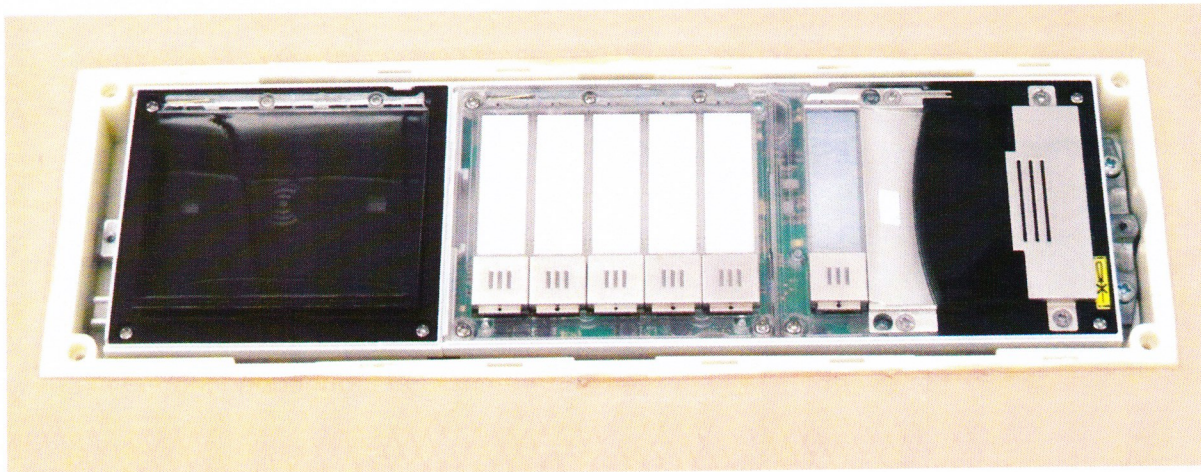


Fig. 6 - placement of the modules in the inner frame (the specimen for flush installation)

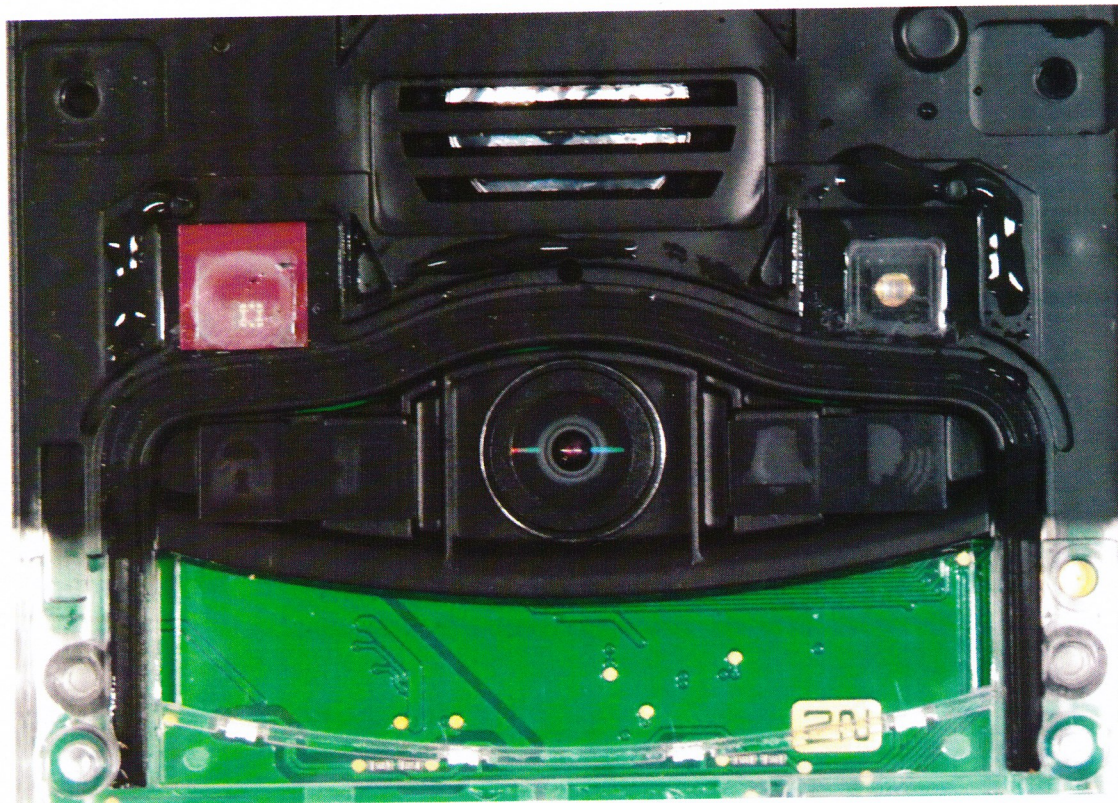


Fig. 7 - module 9155101C without covers

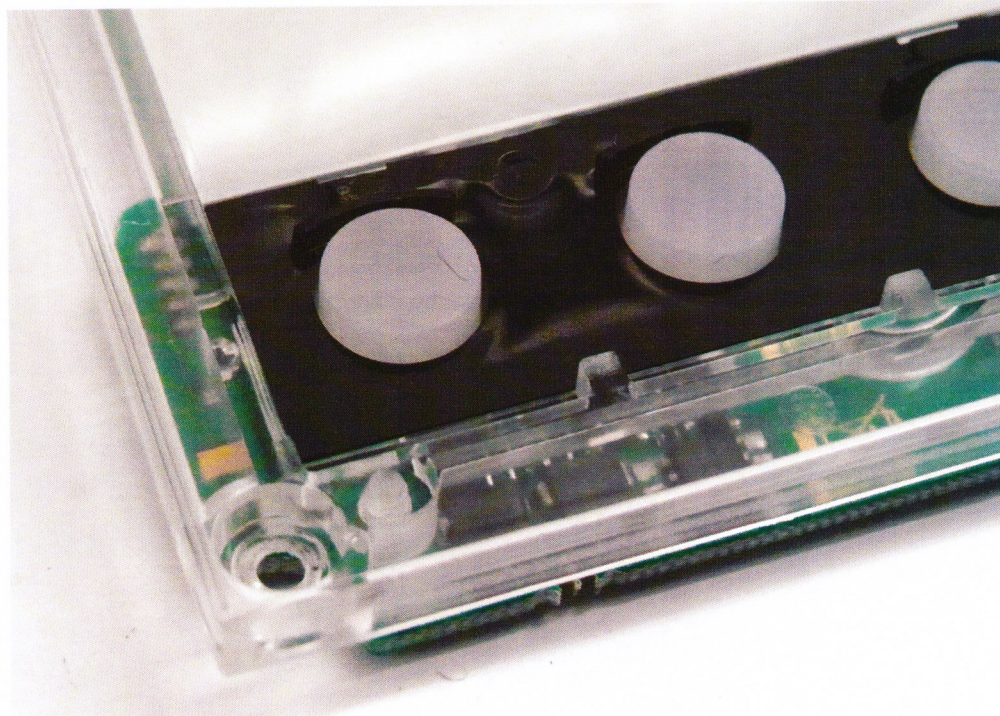


Fig. 8 - module 9155035 - sealing of the buttons

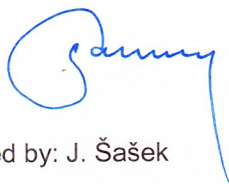
4. Test result

The submitted sets of

IP audio and video door intercom 2N[®] Helios IP Verso

satisfy

conditions for degree of protection provided by enclosures **IP 54** according to ČSN EN 60529:1993 +A1:2001 +A2:2014.



Tested by: J. Šašek

end of Test Report

