

Institute of Mining Technology



Laboratory of Applied Tests
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REPORT

No. 86/BT/2014

Subject: Testing the IP67 protection class of WiBox Large enclosure

Orderer: Wireless Instruments Sp. z o. o.



We inform our Clients that we have
The Quality Managements System Certified
by PCBC S.A. – certificate No. 295/7/2011

Gliwice, April 2014



Project No.: UP/BT -16742/OR

SUBJECT: Testing the IP67 protection class of WiBox Large enclosure

Beginning of tests: 24.04.2014

End of tests: 30.04.2014

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1. Subject of testing

Testing the IP67 protection class of WiBox Large enclosure, delivered by Wireless Instruments Sp. z o. o. having headquarter at Polna 1 in Iwiny, Poland, was the project objective. Delivered objects had serial numbers and were marked by Laboratory with the following numbers (according to RBT register):

- serial number: WI107081, Laboratory number: 31/14/1,
- serial number: WI107082, Laboratory number: 31/14/2.

View of the tested object is given in Fig 1.



Fig. 1. View of the tested object

2. Scope of tests

The scope of tests included testing the IP67 protection class according to the requirements of PN-EN 60529:2003 Standard.



3. Date and place of tests

The tests were conducted on 24÷25.04.2014 in “C” testing room in KOMAG at Pszczyńska 37 in Gliwice, Poland.

4. List of used standards and procedures

The tests were carried out according to the below mentioned standards and testing procedures:

<i>Standard No./ testing procedure No.</i>	<i>Standard name/ testing procedure name</i>
PN-EN 60529:2003	Degrees of protection provided by enclosures (IP Code)
PB-BT/13	Tests for IP protection

5. List of instruments used for tests

The following measuring instruments were used during testing:

<i>Name of the instrument</i>	<i>No. according to R register</i>
Dust chamber	KiŚ5
Stand for water testing of IP code	KiŚ6

Before testing, the measuring instruments were checked according to PN-EN ISO/IEC 17025:2005 Quality System being in force in the Laboratory of Applied Tests at KOMAG.

6. Measurements and tests results

6.1. Testing the protection level for first characteristic digit IP6X

Tests consisted in verification of protection level against ingress of solid particles (first characteristic digit IP 6X). The test was carried out according to the requirements of section 13.4 of PN-EN 60529:2003 Standard.

After testing for the first characteristic digit IP6X, dust was not found inside the tested enclosure.

The result of test for the first characteristic digit IP6X is positive.



6.2. Testing the protection level for second characteristic digit IPX7

Tests consisted in verification of protection against water ingress (second characteristic digit IPX7). The test was carried out according to the requirements of section 14.2.7 of PN-EN 60529:2003 standard.

After testing for the second characteristic digit IPX7, water was not found inside the enclosure.

The result of test for the second characteristic digit IPX7 is positive.

Reservation

Test report includes only the results, which are related to the tested object.

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