

TEST REPORT

1. **Report Number** KR18-YSM0003
2. **Applicant**
 - Name Hanwha Techwin Co.,LTD
 - Address 1204, Changwon-daero, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Korea
 - Date of Receipt January. 17. 2018
3. **Manufacturer**
 - Name Hanwha Techwin Co.,LTD
 - Address 1204, Changwon-daero, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Korea
4. **Use of Report** For Quality management
5. **Test item description**
 - Product Name Network Camera
 - Model Name SNV-L6013R*, SNV-L6014RM*, SNV-L6014RM*, **XNV-6012***, **XNV-6012M***, **XNV-6022R***, **XNV-6022RM*** (*N:NTSC/ P:PAL)
6. **Test method used** IEC 62262 and IEC 60068-2-75
7. **Date of Test** March 16, 2016
8. **Environment**
 - Temperature (15 ~ 35) °C
 - Relative Humidity (25 ~ 75) % R.H
9. **Test Results** ☒ Pass ☐ Fail

※ As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by KCTL

Affirmation	Tested by	Technical Manager
	Name : Hyunwook, Song (Signature)	Name : Jae-Kyu, Lee (Signature)

January. 18. 2018

KCTL INC.



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1. Test Laboratory

1.1 General

Name of Test Laboratory	KCTL INC.
Address	52-20, Sinjeong-ro 41 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do 446-599, Korea
TEL	031-326-6778
FAX	031-326-6799
Home page	www.kctl.co.kr

1.2 Certificate of Designated Testing Laboratory

Mark.	Registration No.
KC	KR0040
KOLAS	NO. KT231
FCC	Registration No. 793314
INDUSTRY CANADA	Registration No. 8035A

2. Specification

Division	Specification
Function	Network Camera (Indoor)

- Basic model: SNV-L6013R* (*N:NTSC/ P:PAL)
- Serise model: SNV-L6014RM*, **XNV-6012***, **XNV-6012M***, **XNV-6022R***, **XNV-6022RM*** (*N:NTSC/ P:PAL)
- The basic model and series models are identical Hardware (Window, Enclosure) only.
- The model SNV-L6013R* (*N:NTSC/ P:PAL) was conducted tests representatively.

Remark – History of amendments and modifications:

Basic Report No. KCTL16-YRS0059, dated 2016-03-15.

Amendment report 1. Test report No. KR18-YSM0003 dated 2018-01-18.

- New model added.

3. Test Method and Result

3.1 IK10 Impacts Test

1) Test Equipment

Number	Instrument description	Model Number	Manufacturer	Due Cal
1	20J IMPACT ELEMENT	N/A	CERTIS	2016-12-05
2	Measuring Tape	3.5 m	Komelon	2018-07-07
3	ELECTRONIC BALANCE	DB-150	CAS	2016-10-02
4	Pendulum Hammer	N/A	N/A	N/A

2) Reference Documents

IEC 62262 and IEC 60068-2-75

Degrees of protection provided by enclosure for electrical equipment against external mechanical impacts (IK code)

3) Test Performed

Degree of protection provided by enclosure for external impacts IK10

4) General Test Conditions

Tamb: 24 °C

Humidity: 26 % R.H

Air pressure: 101.4 kPa

5) Test Conditions

According to standard IEC 62262 and IEC 60068-2-75

The verification of IK10 has been done positioning the enclosure on a rigid support.

5 impacts have been applied on each surface in sight with the enclosure.

For the test used Pendulum Hammer

IK10 (Characteristics of impact test):

Energy: 20 Joule

Mass: 5 kg

High Δh : 400 mm

6) Drop Zones:

The areas that were focused upon for this impact test are as follows:



7) Test Results:

Drop Zone: Enclosure		
Drop #	Orientation / Results	Pass / Fail
Drop 1	Normal to surface of enclosure. Scuff	Pass
Drop 2	Normal to surface of enclosure, about 90° circumferentially from previous drop. Scuff	Pass
Drop 3	Normal to surface of enclosure, about 90° circumferentially from previous drop. Scuff	Pass
Drop 4	Normal to surface of enclosure, about 90° circumferentially from previous drop. Scuff	Pass
Drop 5	Normal to surface of enclosure, about 90° circumferentially from previous drop. Scuff	Pass

Drop Zone: Window		
Drop #	Orientation / Results	Pass / Fail
Drop 1	Vertical drop onto center of Window. Scuff	Pass
Drop 2	Normal to surface of side Window. Scuff	Pass
Drop 3	Normal to surface of side Window, about 90° circumferentially from previous drop. Scuff	Pass
Drop 4	Normal to surface of side Window, about 90° circumferentially from previous drop. Scuff	Pass
Drop 5	Normal to surface of side Window, about 90° circumferentially from previous drop. Scuff	Pass

-Conclusion:

After testing according to the procedure set forth by IEC 62262, model SNV-L6013R*(N:NTSC/ P:PAL) was found to meet the criteria required for an IK10 specification

8) Images (After test):

[Window]



[Enclosure]



4. TEST Photograph

[IK10 Impacts Test_Window]



[IK10 Impacts Test_Enclosure]



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5. Product Photograph



-End-