

TEST REPORT

 CTK Co., Ltd. The Power Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2017-01166 Page (1) / (10) pages	
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1. Applicant

- Name: Hanwha Techwin Co., Ltd.
- Address: Hanwha Techwin R&D center, 6 Pangyo-ro 319Beon-gil,
Bundang-gu, Seongnam-si, Gyeonggi-do, 13488 KOREA
- Date of Receipt.....: 2017-05-29

2. Manufacturer

- Name: HANWHA TECHWIN (TIANJIN) CO.,LTD.
- Address: No.11 Weiliu Rd, Micro-Electronic Industrial
Park, TEDA, Tianjin, 300385, People's Republic of China

3. Use of Report: Quality control

4. Test sample / Model: NETWORK CAMERA / PNM-9080VQ* (*N:NT/P:PAL)

5. Date(s) of test: 2017-06-01

6. Test Standard (Method) used...: Requested Test Specification of Applicant

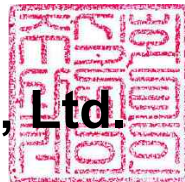
7. Testing Environment: Temperature : (25.0 ± 10.0) oC, Humidity : (50 ± 25) %R.H.

8. Results: Refer to each test items

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
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Approval	Tested by.: WonHyeon. Choi.  (signature)	Technical Manager: YongGon. Kim  (signature)
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CTK Co., Ltd.

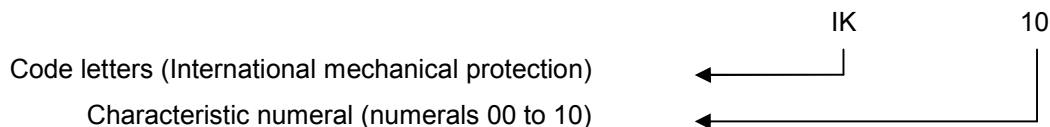


2017-06-14

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

1.1 Test standard: KS C IEC 62262: 2005

1.2 Arrangement of the IK code



1.3 Vertical Hammer

1.3.1 Test equipment

Equipment No.	Equipment	Model	Manufacturer	Serial
S3-V06	Vertical Hammer	5J	Kingpo	TX028-1

1.3.2 Test condition

IK code	Impact Energy (J)	Equivalent mass (kg)	Drop height (mm $\pm$ 1%)	Application
00	Non-protected	-	-	☐
01	0.14	0.25	56	☐
02	0.20	0.25	80	☐
03	0.35	0.25	140	☐
04	0.50	0.25	200	☐
05	0.70	0.25	280	☐
06	1.00	0.25	400	☐
07	2.00	0.50	400	☐
08	5.00	1.70	300	☐
09	10.00	5.00	200	☐
10	20.00	5.00	400	☒

- Impact times: five times for each of the exposed surface. (Do not impact more than 3 times in the same spot)

1.3.3 Check Item

- Check the separation of the component.
- Check the visual damage of the product outside.
- Check the operation.

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1.3.4 Test Result

Characteristic numeral	Result	Remark
IK 10	Pass	The enclosure is deformed. The product operates normally.

Model description

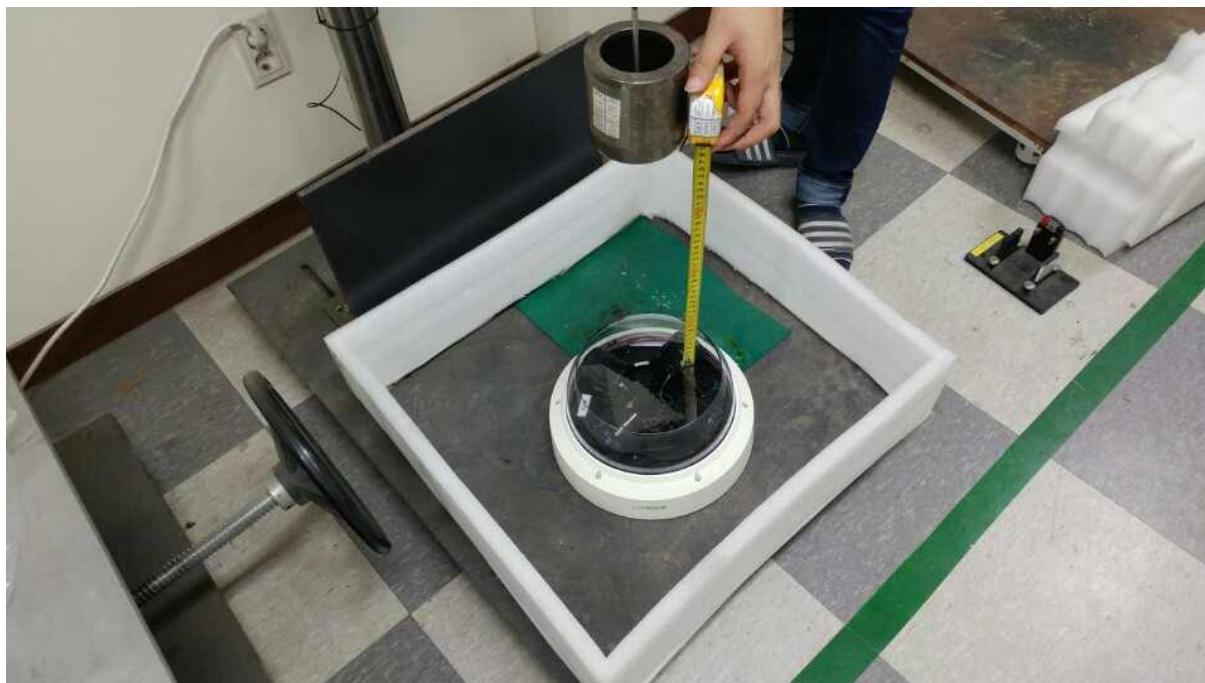
Basic Model	PNM-9080VQ* (*N:NT/P:PAL)
Series model	PNM-9081VQ
Model differences	Use of the same external shape and materials (case, finishing material, PCB, cable, etc.), differences in electronic parts inside the product.

2. Attachment

2.1 Products



2.2 Test photos



2.3 Photos after test

[P1, P2]



[P3]



[P4] , [P5]



2.4 Enclosure Dimensions or Impact point (Unit: mm)

