

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-2021-02169 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..... : 2021-05-17

2. Manufacturer

◦ Name..... : Hanwha Techwin Co., Ltd

3. Use of Report : Quality control

4. Test sample / Model..... : NETWORK CAMERA / PNM-9031RV

5. Date(s) of test : 2021-06-03

6. Test Standard (Method) used.... : KS C IEC 62262: 2005
Client presentation standard

7. Testing Environment..... : Temperature: (25.0 ± 10.0) °C, Humidity: (50 ± 25) %R.H.,
Air Pressure: (99.0 ± 2) kPa

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: Min-Gi Mun  (Signature)	Technical Manager: WonHyeon Choi  (Signature)
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2021-06-11

CTK Co., Ltd.



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Test place

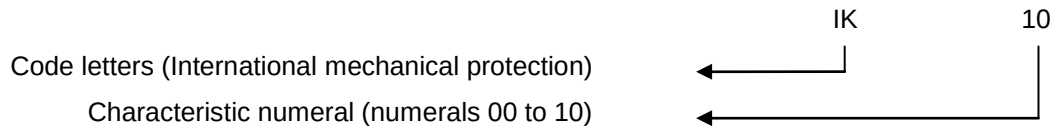
Institution name	CTK Co., Ltd.
Address	113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea

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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	Model	Manufacturer	Serial	
Spring impact hammer	Spring impact hammer(IEC 60068-2-75)	Kingpo Technology Development Limited	KP-SH05	☐
Vertical Hammer Tester	Vertical Hammer	Kingpo technology Development Limited	0190605A01002	☐
Vertical Hammer	20J	Kingpo	TX028-4	☒

1.3.2 Test condition

IK code	Impact Energy (J)	Equivalent mass (kg)	Drop height (mm ± 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

- External protection Enclosure damage check (except accessories not related to outer protection)

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function)

Manufacturer's name

Name and address of factory (ies)	1) HANWHA TECHWIN SECURITY VIETNAM CO.,LTD Lot O-2, Que Vo Industrial Zone extended area, Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam 2) D-TECH CO.,LTD. 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea (Suwon Industrial Complex)
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1.3.4 Test Result

Item	Contents	Result
External protection Enclosure	No damage	Pass
Comment Some scratches were generated on the outside of the product.		

Manufacturer's name

Name and address of factory (ies)	1) HANWHA TECHWIN SECURITY VIETNAM CO.,LTD Lot O-2, Que Vo Industrial Zone extended area, Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam 2) D-TECH CO.,LTD. 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea (Suwon Industrial Complex)
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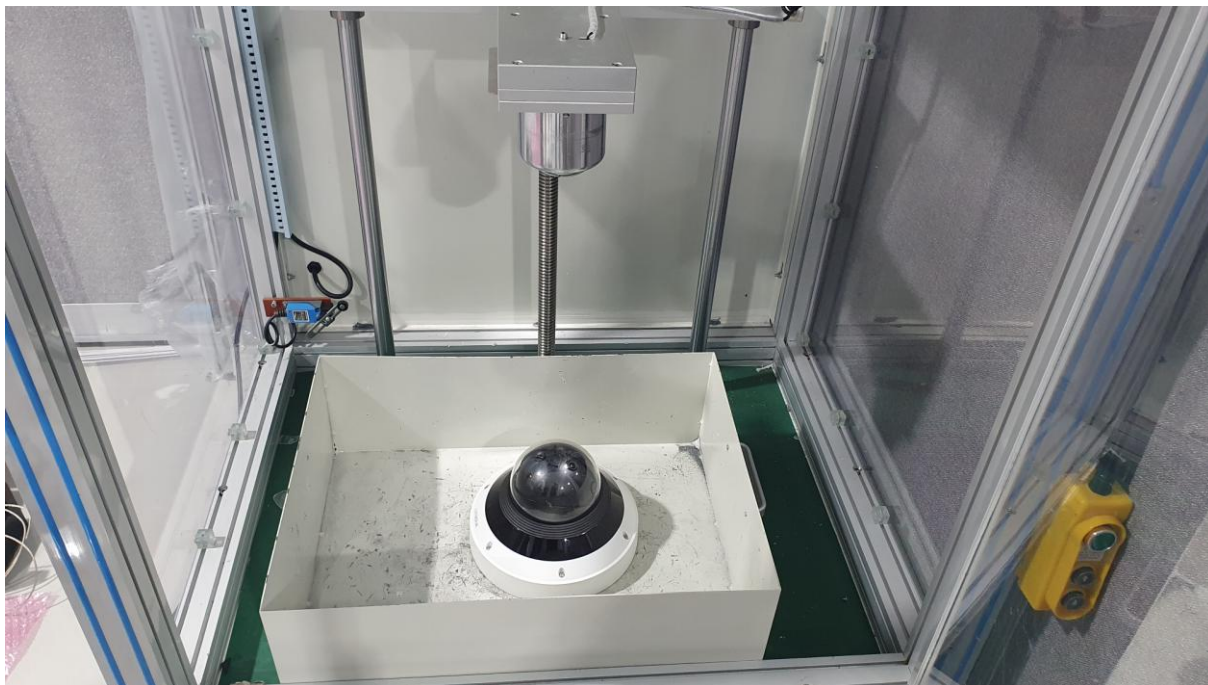
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2. Attachment

2.1 Products



2.2 Test photos



2.3 Photos after test





