

TEST REPORT

**CTK Co., Ltd.**

5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si,
Gyeonggi-do, Republic of Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

REPORT No.:
CTK-2022-00180-1
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1. Client

- 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 : 2021-12-20

2. Manufacturer

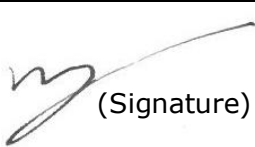

- Name : Hanwha Techwin Co., Ltd.
- Address : Hanwha Techwin R&D center, 6 Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13488 KOREA

3. Use of Report : Quality control**4. Test Sample / Model:** NETWORK CAMERA / PNM-A9083RVD**5. Date of Test :** 2022-01-05**6. Location of Test :** ☒ Permanent Testing Lab ☐ On Site Testing

(Address : 144, Dongbu-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea)

7. Test Standard (metod) used : KS C IEC 62262: 2005**8. Testing Environment:** Temperature: (20.0 ± 1.0) °C, Humidity: (50.0 ± 1.0) %R.H.,**9. Test Results :** Refer to each test items

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full.

Affirmation	Tested by	Technical Manager
	Min-Gi Mun :  (Signature) Test Engineer	WonHyeon Choi :  (Signature) Technical Manager

2022-03-11

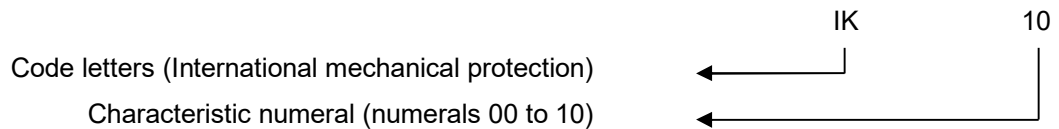
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1. Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)

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	<input type="checkbox"/>
Vertical Hammer Tester	Vertical Hammer	Kingpo technology Development Limited	0190605A01002	<input checked="" type="checkbox"/>
Vertical Hammer	20J	Kingpo	TX028-4	<input checked="" type="checkbox"/>

1.3.2 Test condition

IK code	Impact Energy (J)	Equivalent mass (kg)	Drop height (mm ± 1%)	Application
00	Non-protected	-	-	<input type="checkbox"/>
01	0.14	0.25	56	<input type="checkbox"/>
02	0.20	0.25	80	<input type="checkbox"/>
03	0.35	0.25	140	<input type="checkbox"/>
04	0.50	0.25	200	<input type="checkbox"/>
05	0.70	0.25	280	<input type="checkbox"/>
06	1.00	0.25	400	<input type="checkbox"/>
07	2.00	0.50	400	<input type="checkbox"/>
08	5.00	1.70	300	<input type="checkbox"/>
09	10.00	5.00	200	<input type="checkbox"/>
10	20.00	5.00	400	<input checked="" type="checkbox"/>
- Impact times: five times for each of the exposed surface. (Do not impact more than 3 times in the same spot)				

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1.3.3 Check Item

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

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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Model description

Basic Model	PNM-A9083RVD
Series model	PNM-C12083RVD, PNM-C7083RVD, PNM-12082RVD, PNM-7082RVD
Model differences	Use of the same external shape and materials (case, finishing material, PCB, cable, etc.), differences in electronic parts inside the product.

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2. Attachment


2.1 Products

< Photo 1 > Product External view



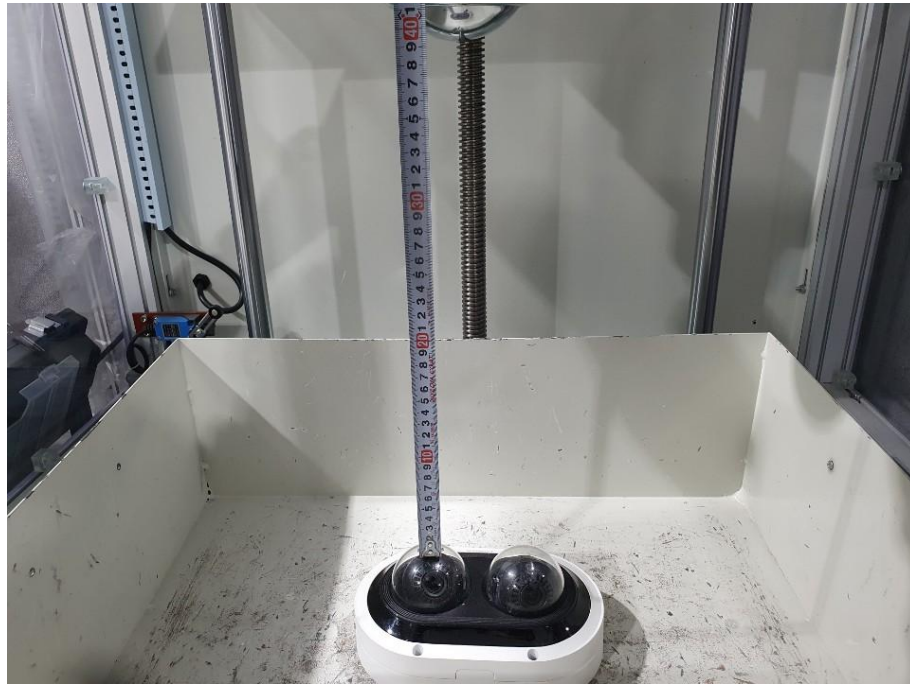
< Photo 2 > Product External view




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2.2 Test photos

< Photo 3 > Test photo



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2.3 Photos after test

< Photo 4 >



< Photo 5 >

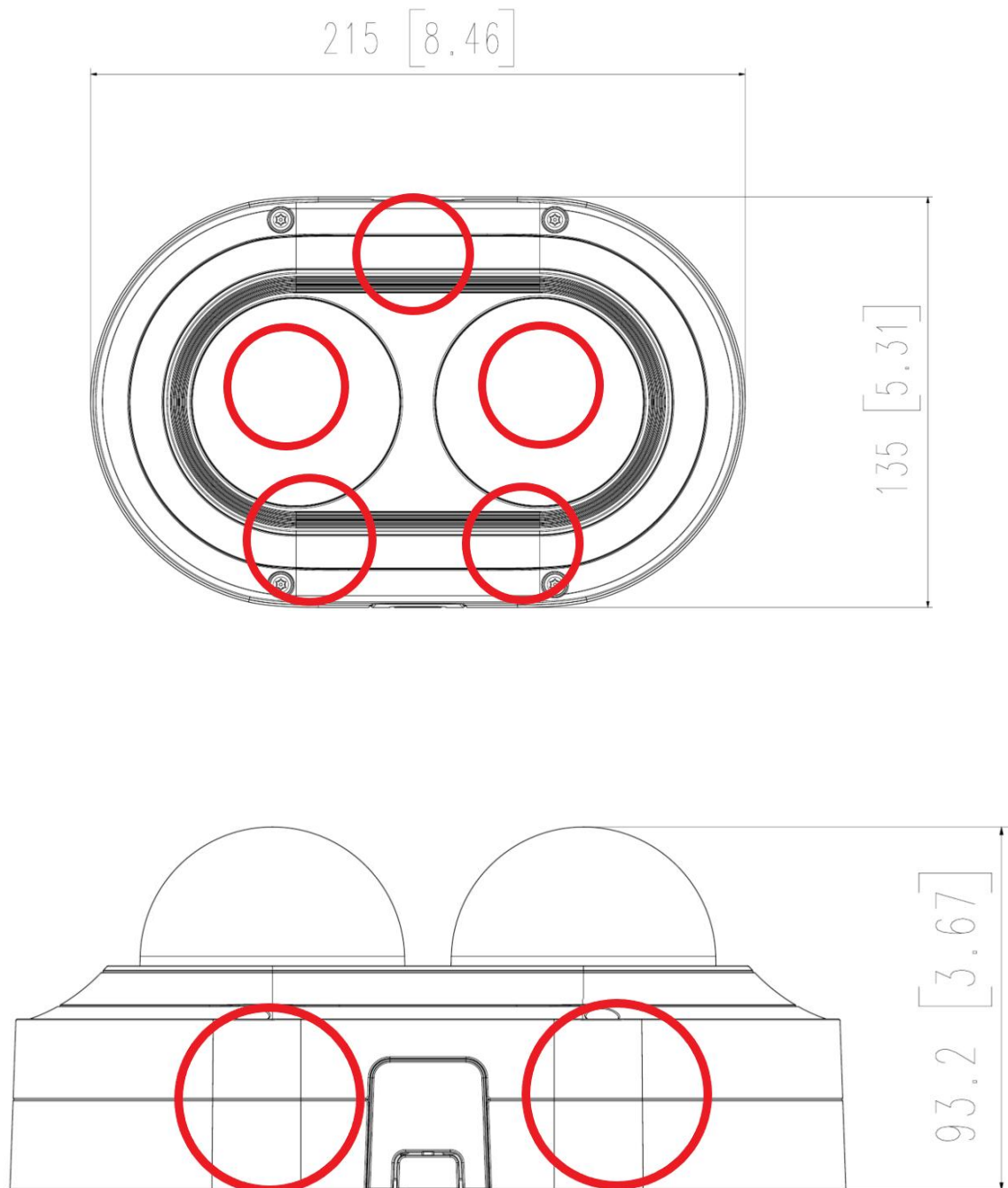


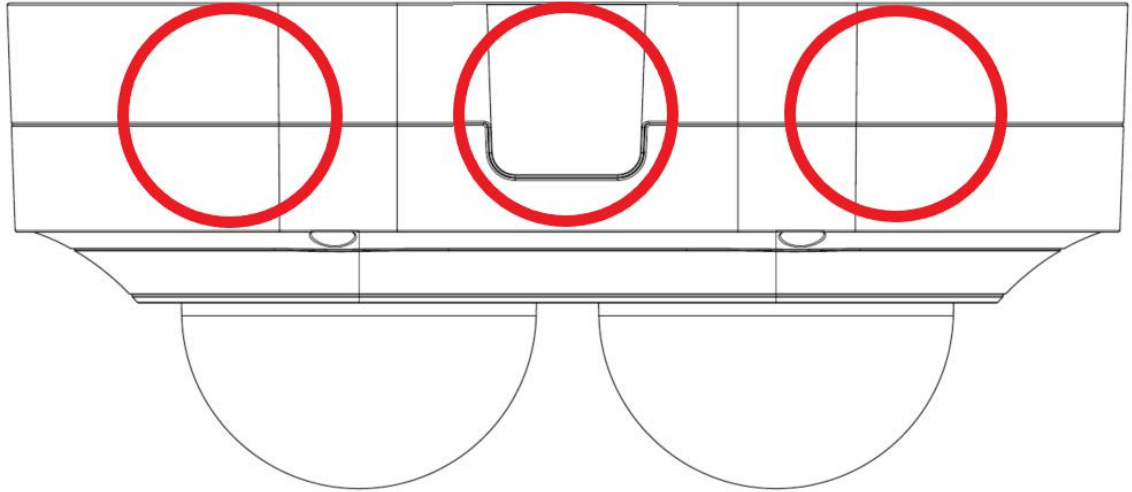
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< Photo 6 >



2.4 Enclosure Dimensions or Impact point (Unit: mm)





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