

# TEST REPORT

|                                                                                                                                                        |                                                                                                                                                          |                                                        |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--|
| <br>CTK Co., Ltd.<br>The Power Leader of Global Regulatory Compliance | <b>CTK Co., Ltd.</b><br>5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si,<br>Gyeonggi-do, Republic of Korea<br>Tel: +82-31-339-9970<br>Fax: +82-31-624-9501 | Report No.:<br>CTK-2023-02288<br>Page (1) / (12) pages |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--|

**1. Applicant**

- Name : Hanwha Vision Co., Ltd  
◦ Address : 6 Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13488 KOREA  
◦ Date of Receipt : 2023-10-13

**2. Manufacturer**

- Name : Hanwha Vision Co., Ltd

**3. Use of Report**

: Quality control

**4. Test sample / Model**

: NETWORK CAMERA / XNP-C9310R

**5. Date(s) of test**

: 2023-10-16

**6. Location of Test**

: ☒ Permanent Testing Lab ☐ On Site Testing  
(Address: 5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea)

**7. Test Standard (Method) used** : KS C IEC 62262: 2005

**8. Testing Environment** : Temperature: (25.0 ± 5) °C,  
Humidity: (40.0 ± 5) % 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<br>HyungUk Jeon<br>(Signature) | Technical Manager<br>SooChan Bae<br>(Signature) |
|-------------|------------------------------------------|-------------------------------------------------|

Remark. This report is not related to KOLAS accreditation and relevant regulation.

2023-10-24

**CTK Co., Ltd**



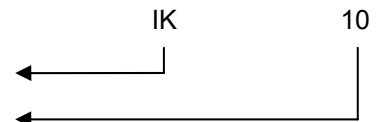
## 1. Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)

### 1.1. Test standard: KS C IEC 62262: 2005

### 1.2. Arrangement of the IK code

Code letters (International mechanical protection)

Characteristic numeral (numerals 00 to 10)



### 1.3 Vertical Hammer

#### 1.3.1 Test equipment

| Equipment              | Model           | Manufacturer | Serial        | Application                         |
|------------------------|-----------------|--------------|---------------|-------------------------------------|
| Vertical Hammer Tester | Vertical Hammer | Kingpo       | 0190605A01002 | <input checked="" type="checkbox"/> |
| Vertical Hammer        | 20J             | Kingpo       | TX028-3       | <input checked="" type="checkbox"/> |

#### 1.3.2 Test condition

| IK code                                                                                                        | Impact Energy (J) | Equivalent mass (kg) | Drop height (mm $\pm$ 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<br><br>Some scratches were generated on the outside of the product. |           |        |

## Model description

|                    |                                                                                                                                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic Model .....  | XNP-C9310R                                                                                                                                     |
| Series Model ..... | XNP-C7310R                                                                                                                                     |
| Model differences  | Use of the same external shape and materials (case, finishing material, PCB, cable, etc.), differences in electronic parts inside the product. |

## Manufacturer's name

|                                          |                                                                                                                                                                                                                                                                                             |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name and address of factory (ies)</b> | 1) HANWHA VISION VIETNAM COMPANY LIMITED<br>Lot O-2, Que Vo Industrial Zone extended area, Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam<br><br>2) D-TECH CO., LTD.<br>Suwon INDUSTRIAL COMPLEX NO 2, 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi-do, Republic of Korea |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                    |                                                                                                                                                                     |                                                                 |  |
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## 2. APPENDIX

### 2.1. Product Photographs



## 2.2. Test photos



|                                                                                                                                                                    |                                                                                                                                                                     |                                                                 |  |
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### 2.3. Photos after test



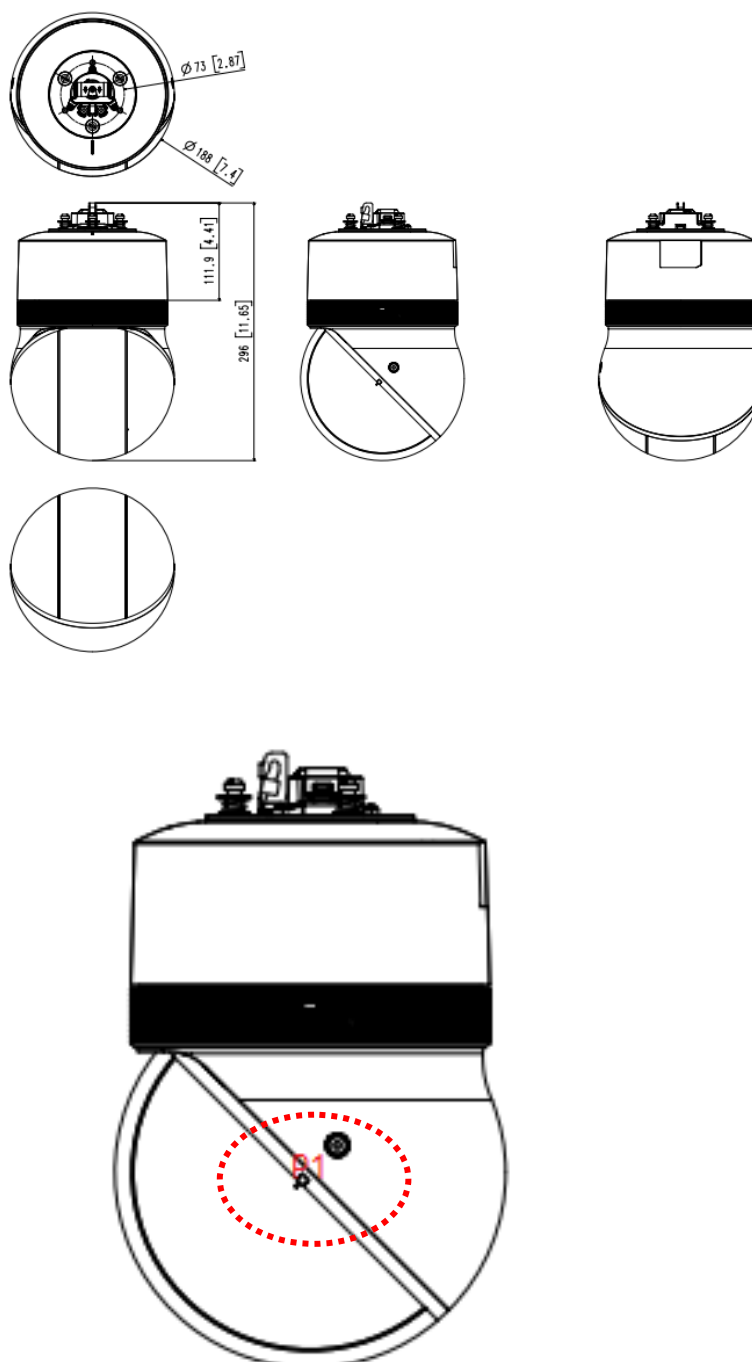


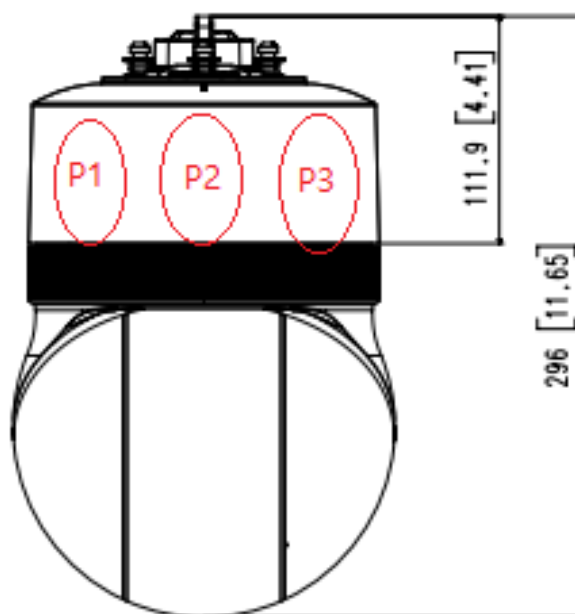
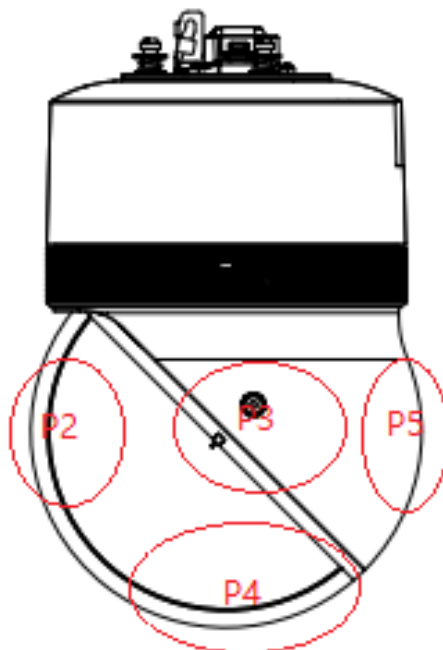
#### 2.4. Enclosure Dimensions or Impact point (Unit: mm)

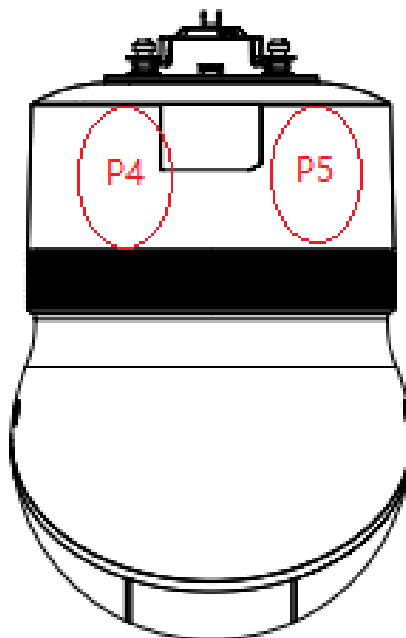




## 2.5. Enclosure Dimensions or Impact point (Unit: mm)







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