

# TEST REPORT

|                                                                                                                                                                                 |                                                                                                                                                          |                                                                |                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <br><b>CTK Co., Ltd.</b><br><small>The Power Leader of Global Regulatory Certification</small> | <b>CTK Co., Ltd.</b><br>(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi<br>Gyeonggi-do KOREA, REPUBLIC OF<br>Tel: +82-31-339-9970<br>Fax: +82-31-624-9501 | <b>REPORT No.:</b><br>CTK-K-2020-00520<br>Page (1) / (9) pages | <br>KOLAS<br>TESTING NO. KT119 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|

## 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.....: 2020-06-04

## 2. Manufacturer

◦ Name .....: Hanwha Techwin Co., Ltd.

## 3. Use of Report .....: Quality control

## 4. Test sample / Model .....: NETWORK CAMERA / XNF-9010RV

## 5. Date(s) of test .....: 2020-07-13

## 6. Test Standard (Method) used....: KS C IEC 62262: 2005

## 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

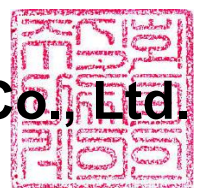
The results shown in this test report refer only to the sample(s) tested unless otherwise stated.  
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|          |                                                                                                                           |                                                                                                                                       |
|----------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Approval | Tested by:<br>SooChan Bae  (Signature) | Technical Manager:<br>YenHwang Jung  (Signature) |
|----------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|

The above testing certificate is the accredited test result by Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA

2020-07-20

**CTK Co., Ltd.**



|                                                                                                                                                                       |                                                                                                                                                                     |                                                                       |                                                                                     |
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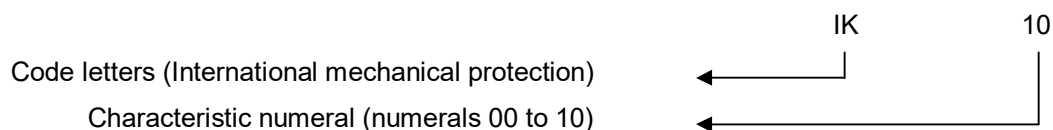
## Test place

|                         |                                                                        |
|-------------------------|------------------------------------------------------------------------|
| <b>Institution name</b> | CTK Co., Ltd.                                                          |
| <b>Address</b>          | 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do,<br>Republic of Korea |

## 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   |
|-----------------|-------|--------------|----------|
| Vertical Hammer | 50J   | Kingpo       | TX-029-4 |

#### 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) |                   |                      |                       |                                     |

#### 1.3.3 Check Item

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

|                                                                                                                                                                       |                                                                                                                                                                     |                                                                       |                                                                                     |
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#### 1.3.4 Test Result

| Item                                                                        | Contents  | Result |
|-----------------------------------------------------------------------------|-----------|--------|
| External protection Enclosure<br>(Body only)                                | No damage | Pass   |
| Comment<br><br>Some scratches were generated on the outside of the product. |           |        |

#### Manufacturer's name

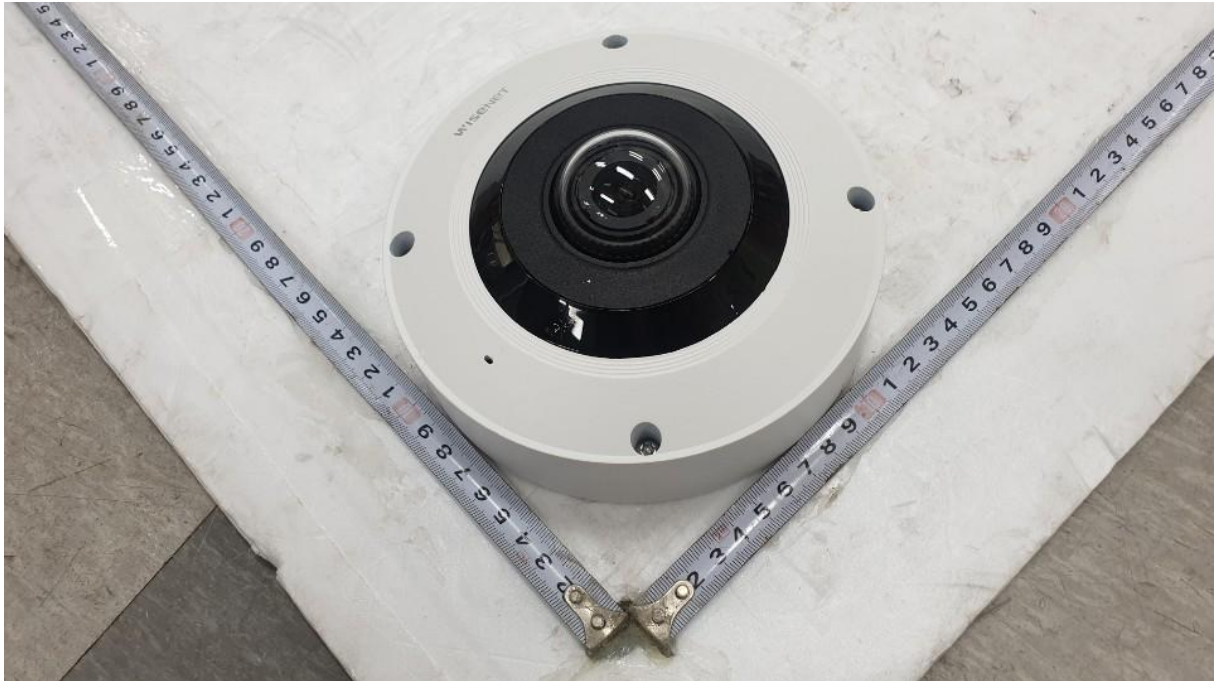
|                                      |                                                                                                                                                                                                                                                                    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

#### Model description

|                         |                                                                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic Model .....       | XNF-9010RV                                                                                                                                           |
| Series model .....      | XNF-9010RVM, ANF-9010RV, ANF-9010RVM, PNF-A9011RV,<br>PNF-A9011RVM, XNF-8011RV, XNF-8011RVM                                                          |
| Model differences ..... | Use of the same external shape and materials (case, finishing<br>material, PCB, cable, etc.), differences in electronic parts inside the<br>product. |

## 2. Attachment

### 2.1 Products



## 2.2 Test photos



### 2.3 Photos after test



**2.4 Enclosure Dimensions or Impact point (Unit: mm)**

