

TEST REPORT

	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-2021-02217-1 Page (1) / (11) 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..... : 2021-05-04

2. Manufacturer

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

3. Use of Report : Quality control

4. Test sample / Model..... : NETWORK CAMERA / TNO-7180R



5. Date(s) of test : 2021-05-04

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: Min-Gi Mun  (Signature)	Technical Manager: Sang Wook Woo  (Signature)
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2022-11-07

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Test place

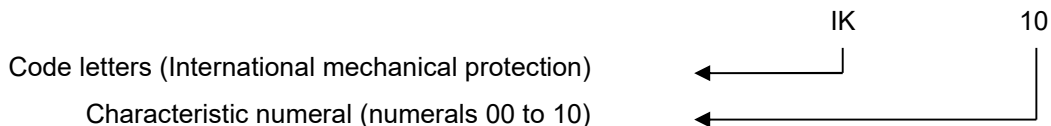
Institution name	CTK Co., Ltd.
Address	142, Dongbu-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea

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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	<input type="checkbox"/>
Vertical Hammer Tester	Vertical Hammer	Kingpo technology Development Limited	0190605A01002	<input checked="" type="checkbox"/>
Vertical Hammer	20J	Kingpo	TX029-3	<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.		

Model description

Basic Model	TNO-7180R
Series model	TNO-7180RLP
Model differences	The model TNO-7180RLP is identical to TNO-7180R except model designation.



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2. Attachment


2.1 Products

< Photo 1 > Product External view



< Photo 2 > Product External view



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< Photo 3 > Product label





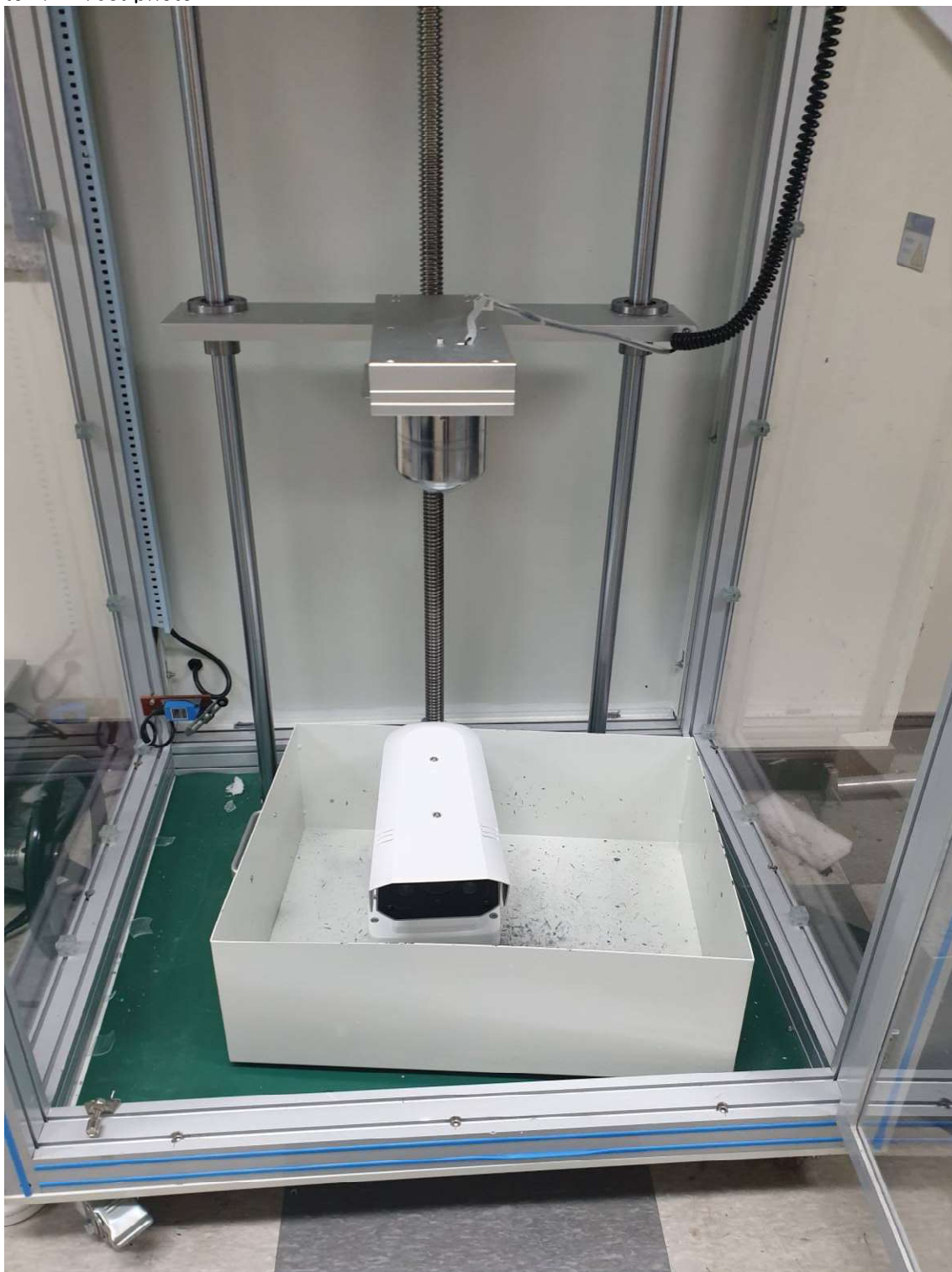
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2.2 Test photos

< Photo 4 > Test photo





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2.3 Photos after test

< Photo 5 >



< Photo 6 >



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< Photo 7 >



< Photo 8 >



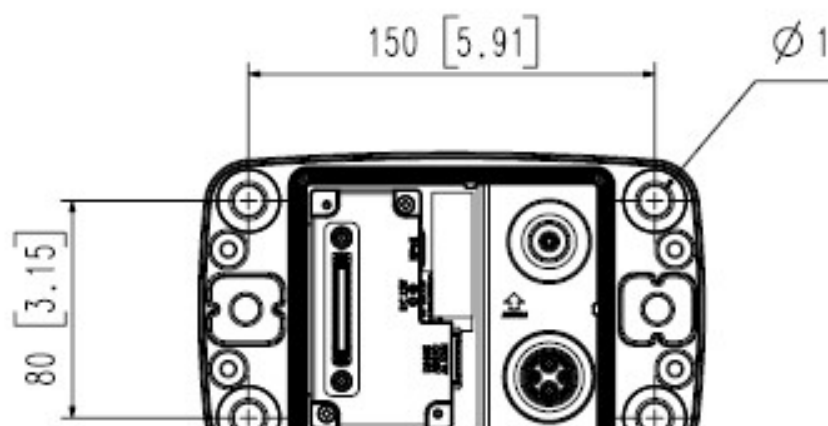
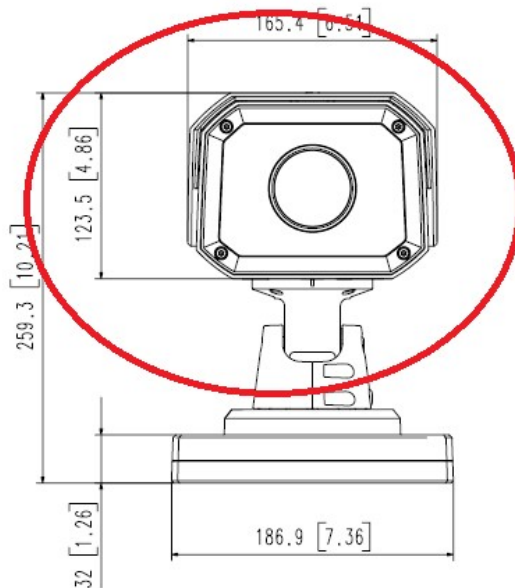


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2.4 Enclosure Dimensions or Impact point (Unit: mm)



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