

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-2017-02421 Page (1) / (10) pages	
---	--	---	--

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..... : 2017-10-26

2. Manufacturer

- Name : HANWHA TECHWIN (TIANJIN) CO.,LTD.
- Address..... : No.11 Weiliu Rd, Micro-Electronic Industrial
Park, TEDA, Tianjin, 300385, People's Republic of China

3. Use of Report : Quality control

4. Test sample / Model..... : THERMAL CAMERA / TNO-4041T* (*N:NT/P:PAL)

5. Date(s) of test : 2017-12-21

6. Test Standard (Method) used .. : Requested Test Specification of Applicant

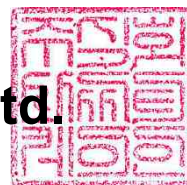
7. Testing Environment : Temperature : (25.0 ± 10.0) °C, Humidity : (50 ± 25) %R.H.
Air Pressure: (99.0 ± 2) kPa

8. Results : Reference test results

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
This report shall not be reproduced except in full without the written approval of CTK

Approval	Tested by: WonHyeon Choi  (Signature)	Technical Manager: YenHwang Jung  (Signature)
----------	---	---

CTK Co., Ltd.



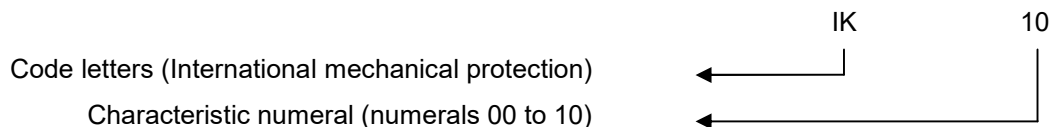
2017-12-22

 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-2017-02421 Page (2) / (10) pages	
---	--	--	--

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	20J	Kingpo	TX028-1

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

- Check the separation of the component.
- Check the visual damage of the product outside.

 CTK Co., Ltd. The Prime 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-2017-02421 Page (3) / (10) pages	
---	--	---	--

1.3.5 Test Result

Characteristic numeral	Remark
IK 10	The enclosure is scratch

2. Attachment

2.1 Products



2.2 Test photos



2.3 Photos after test

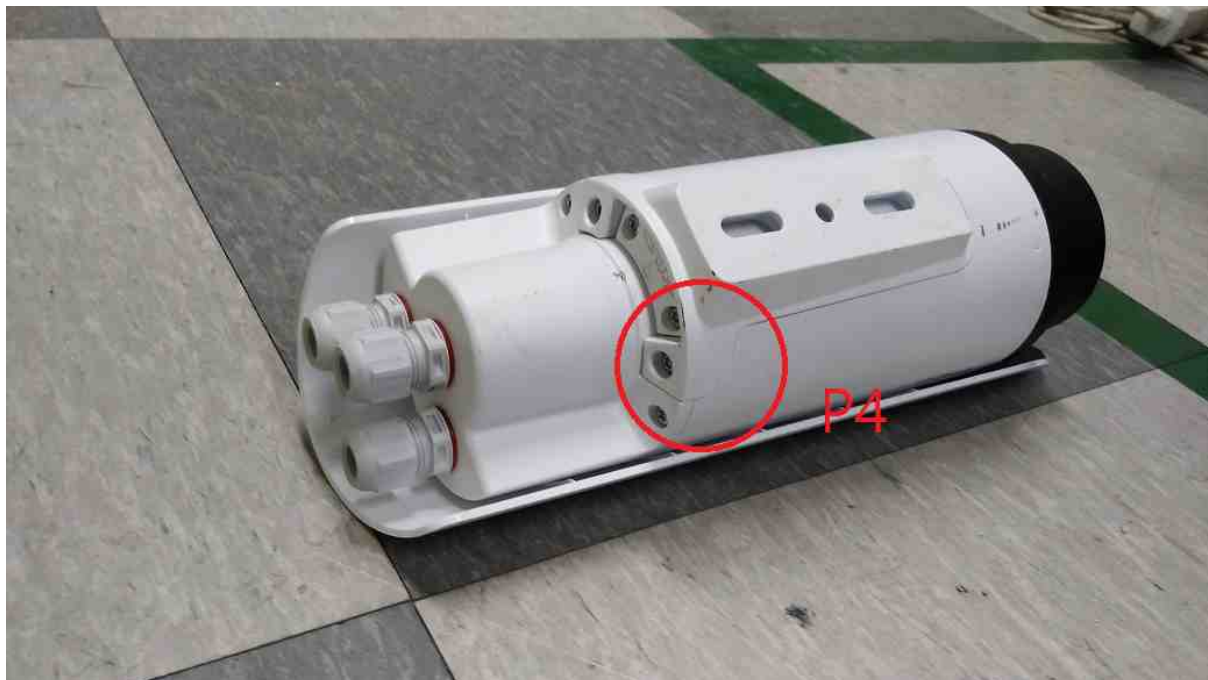
[P1]



[P2, P3]



[P4]



[P5]



2.4 Enclosure Dimensions or Impact point (Unit: mm)

