

TEST REPORT

 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(1) / (22) 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: 2017-02-06

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. Test sample / Model: NETWORK CAMERA / XNO-6010R* (*N:NT/P:PAL)

4. Date(s) of test: 2017-02-22

5. Test Standard (Method) used: NEMA 250-2014 Enclosures for Electrical Equipment (1000 Volts Maximum)

6. Results: Pass

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

Affirmation	Tested by: WonHyeon. Choi.  (signature)	Technical Manager: YongGon. Kim  (signature)
-------------	---	--

2017-03-17

CTK Co., Ltd.



 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(2) / (22) Pages	
---	---	--	--

Test item description : NETWORK CAMERA
Trade Mark : 
Manufacturer : No.11 Weiliu Rd, Micro-Electronic Industrial Park, TEDA, Tianjin, 300385, People's Republic of China
Model/Type reference : XNO-6010R* (*N:NT/P:PAL)
Ratings : Electrical : DC12V/POE Dimension : 70.0 mm by 70.0 mm by 296.0 mm

List of Attachments (including a total number of pages in each attachment):
Attachment 1: 12-14 pages (Construction Diagram including installation method)
Attachment 2: 15-17 pages (Parts List)
Attachment 3: 18-22 pages (photographs)

Summary of testing:	
Tests performed (name of test and test clause): Clause 5.7(Hose Down Test)	Testing location: CTK Co., Ltd. (Ho-Dong) 113, Yejik-ro Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF

Copy of marking plate: The artwork above may be only a draft.

NETWORK CAMERA, XNO-6010R DC 12V  8.8W PoE (37-57V)  9.7W M/C:XXXXXXXXXX  제조년월 2016.05 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX 제조자/제조국가 : 한화테크윈(주)/한국	NETWORK CAMERA, XNO-6010R DC 12V  8.8W PoE (37-57V)  9.7W M/C:XXXXXXXXXX  제조년월 2016.05 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX 제조자/제조국가 : 한화테크윈(주)/중국
NETWORK CAMERA, XNO-6010RP DC 12V  0.7A PoE (37-57V)  0.3A M/C:XXXXXXXXXX  May 2016 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX HANWHA TECHWIN CO., LTD. MADE IN KOREA	NETWORK CAMERA, XNO-6010RP DC 12V  0.7A PoE (37-57V)  0.3A M/C:XXXXXXXXXX  May 2016 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX HANWHA TECHWIN CO., LTD. MADE IN CHINA
NETWORK CAMERA, XNO-6010RN DC 12V  0.7A PoE (37-57V)  0.3A M/C:XXXXXXXXXX  May 2016 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX Fac. ID : S HANWHA TECHWIN CO., LTD. MADE IN KOREA	NETWORK CAMERA, XNO-6010RN DC 12V  0.7A PoE (37-57V)  0.3A M/C:XXXXXXXXXX  May 2016 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX Fac. ID : T HANWHA TECHWIN CO., LTD. MADE IN CHINA

 CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(3) / (22) Pages	
---	---	--

NETWORK CAMERA, XNO-6010RP DC 12V 0.7A PoE (37-57V) 0.3A M/C:XXXXXXXXXX  May 2016 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX Fac. ID : S HANWHA TECHWIN CO., LTD. MADE IN KOREA  	NETWORK CAMERA, XNO-6010RP DC 12V 0.7A PoE (37-57V) 0.3A M/C:XXXXXXXXXX  May 2016 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX Fac. ID : T HANWHA TECHWIN CO., LTD. MADE IN CHINA  
NETWORK CAMERA, XNO-6010RP DC 12V 0.7A PoE (37-57V) 0.3A M/C:XXXXXXXXXX  May 2016 S/N:XXXXXXXXXXXXXX MAC ADDRESS: XX-XX-XX-XX-XX-XX HANWHA TECHWIN CO., LTD. MADE IN CHINA  	

Test item particulars..... : Network Camera
Classification of installation and use : Outdoor(Watertight/Corrosion Resistant)
Possible test case verdicts: - test case does not apply to the test object..... : N/A - test object does meet the requirement : P (Pass) - test object does not meet the requirement..... : F (Fail) - test case does not evaluated to the test object : N/E

General remarks: "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a ☐ comma / ☒ point is used as the decimal separator. Clause numbers between brackets refer to clauses in NEMA 250-2014
Name and address of factory (ies): 1. HANWHA TECHWIN (TIANJIN) CO.,LTD. No.11 Weiliu Rd, Micro-Electronic Industrial Park, TEDA, Tianjin, 300385, People's Republic of China General product information: Applied NEMA Rating : 4X Model XNO-6010RN is basic model which was tested.



CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, KOREA, REPUBLIC OF

Tel: +82-31-339-9970

Fax: +82-31-624-9501

Report No.:

CTK-2017-00475

Page(4) / (22) Pages

Type 4X

Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust); to provide a degree of protection with respect to harmful effects on the equipment due to the ingress of water (rain, sleet, snow, splashing water, and hose directed water); that provides an increased level of protection against corrosion; and that will be undamaged by the external formation of ice on the enclosure.

Table 2-1
Comparison of Specific Applications of Enclosures for Indoor Nonhazardous
(Unclassified) Locations

Provides a Degree of Protection against the Following Conditions	Type of Enclosure									
	1	2	4	4X	5	6	6P	12	12K	13
Access to hazardous parts	X	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (falling dirt)	X	X	X	X	X	X	X	X	X	X
Ingress of water (dripping and light splashing)	...	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (circulating dust, lint, fibers, and flyings **)	...	...	X	X	...	X	X	X	X	X
Ingress of solid foreign objects (settling airborne dust, lint, fibers, and flyings **)	...	...	X	X	X	X	X	X	X	X
Ingress of water (hosedown and splashing water)	...	...	X	X	...	X	X	...	...	...
Oil and coolant seepage	...	...	...	...	...	...	...	X	X	X
Oil or coolant spraying and splashing	...	...	...	...	...	...	...	...	...	X
Corrosive agents	...	...	...	X	...	...	X	...	...	...
Ingress of water (occasional temporary submersion)	...	...	...	...	...	X	X	...	...	...
Ingress of water (occasional prolonged submersion)	...	...	...	...	...	...	X	...	...	...

** These fibers and flyings are not considered Class III type ignitable fibers or combustible flyings. For Class III type ignitable fibers or flyings see the *National Electrical Code®*, Article 500.5(D).

Table 2-2
Comparison of Specific Applications of Enclosures for Indoor & Outdoor Nonhazardous
(Unclassified) Locations

Provides a Degree of Protection Against the Following Conditions	Type of Enclosure									
	3	3X	3R	3RX	3S	3SX	4	4X	6	6P
Access to hazardous parts	X	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (falling dirt)	X	X	X	X	X	X	X	X	X	X
Ingress of water (dripping and light splashing)	X	X	X	X	X	X	X	X	X	X
Ingress of water (rain, snow, and sleet **)	X	X	X	X	X	X	X	X	X	X
Sleet ***	...	...	...	...	X	X	...	...	...	...
Ingress of solid foreign objects (windblown dust, lint, fibers, and flyings****)	X	X	...	...	X	X	X	X	X	X
Ingress of water (hosedown and splashing water)	...	...	...	...	...	...	X	X	X	X
Corrosive agents	...	X	...	X	...	X	...	X	...	X
Ingress of water (occasional temporary submersion)	...	...	...	...	...	...	...	...	X	X
Ingress of water (occasional prolonged submersion)	...	...	...	...	...	...	...	...	...	X

** External operating mechanisms are not required to be operable when the enclosure is ice covered.

*** External operating mechanisms are operable when the enclosure is ice covered. See subsection 5.6.

**** These fibers and flyings are not considered Class III type ignitable fibers or combustible flyings. For Class III type ignitable fibers or flyings see the *National Electrical Code®*, Article 500.5(D).

Table 5-1A
Degrees of Protection Against Access to Hazardous Parts

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP First Characteristic Numeral
		Brief Description	Definition	
4X	5.7	Protected against access to hazardous parts with a wire	An access probe of 1.0 mm shall not penetrate	6

Table 5-1B
Degrees of Protection Against Solid Foreign Objects

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP First Characteristic Numeral
		Brief Description	Definition	
4X	<u>Non-vented</u> 5.7	Windblown dust protected	No ingress of dust	6
	<u>Vented</u> 5.5.1 Dust Blast Method			



CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, KOREA, REPUBLIC OF
Tel: +82-31-339-9970
Fax: +82-31-624-9501

Report No.:
CTK-2017-00475
Page(6) / (22) Pages

Table 5-1C
Degrees of Protection against Water

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP Second Characteristic Numeral
		Brief Description	Definition	
4X	5.7	Protected against hose directed water	Water projected against the enclosure in any direction shall not enter	6 No Ingress Allowed*

Table 5-1D
Additional Protection

Enclosure Type	Test Conditions	Additional Protection		Corresponding IP Second Characteristic Numeral
		Brief Description	Definition	
4X	5.6 5.9 5.10	Special corrosion protection and undamaged by the external formation of ice	Enclosure provides increased corrosion protection and is not damaged by ice that forms on the outside	None

 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(7) / (22) Pages	
---	---	--	--

NEMA 250-2014			
Clause	Requirement + Test	Result - Remark	Verdict
3	CONSTRUCTION		

3.1	General		P
3.2	Units of Measurement		P
3.3	Materials-General	Enclosures are made of metal or polymeric materials	P
3.4	Materials-Polymeric	More than 650 mm ² (1 in ²) in area Polymeric Materials used is declared as Min. V-0 Used to UL certified material. (See the attachment 2)	N/E
3.5	Corrosion Protection	Stainless steel and/or aluminium are declared as the materials used (See the attachment 2)	N/E
3.6	Openings	No openings in Product	N/A
3.7	Mounting	Mounting means are external to the equipment cavity (See the attachment 1)	P
3.8	Conduit Connection	No conduit connection (See the attachment 1)	N/A
3.9	Hubs and Fittings	No Hubs and Fittings	N/A
3.10	Knockouts	No Knockouts	N/A
3.11	External Operating Mechanisms	No External Operating Mechanisms	N/A
3.12	Access to Interior	Needs tool to open unit	P
3.13	Closing Hardware	No closing Hardware	N/A
3.14	Gaskets	Gaskets made of a silicone Sponge Rubber (no Elastomeric or Thermoplastic used) (See clause 5.14 and the attachment 2)	P
3.15	Observation Windows	No Observation Window	N/A

4	MARKING		
----------	----------------	--	--

 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(8) / (22) Pages	
---	---	--	--

NEMA 250-2014			
Clause	Requirement + Test	Result - Remark	Verdict
4.1	Type Designations	"Type 4X" Marking is declared to be on the product before on the market	P
4.2	Supplemental Markings	Supplemental Marking (watertight/ corrosion resistant) is declared to be used when it is on the market. The required marking shall be added on the product)	P
4.3	Location of Markings	See the Attachment 3	P
4.4	Enclosure Orientation	No Particular Mounting Orientation	N/A
4.5	Conduit Hubs and Closure Plates	No Conduit Hubs and Closure Plates	N/A
4.6	Equipment Openings	No Openings on Unit	N/A
4.7	Drainage Openings	No Drain Openings	N/A

5	DESIGN TESTS	
----------	---------------------	--

5.1	General	See Table 5-1A to 5-1D and 5.1.5 in the General product information	P
5.2	Tests For Protection Against Access to Hazardous Parts	Rated 4X	N/A
5.3	Tests for Protection Against Ingress of Water (Dripping and Light Splashing)	Rated 4X	N/A
5.4	Tests for Protection Against Ingress of Water (Rain)	Rated 4X	N/A
5.5	Tests for Protection Against Ingress of Solid Foreign Objects (Setting Airborne Dust, Lint, Fibers, And Flings)	Non-vented (See clause 5.7)	N/A
5.6	External Icing Test	No external cavities to trap water when mounted in the normal position.	N/A
5.7	Tests for Protection Against Ingress of Water (Hosedown)	No entry of water See the test information	P
5.8	Indoor Corrosion Protection (Rust-Resistance Test (24-Hour Salt Spray Test))	See clause 3.5	N/E
5.9	Outdoor Corrosion Protection	See clause 3.5	N/E
5.10	Corrosion Protection-Type 3X, 3RX, 3SX, 4X Or 6P Enclosures	See clause 3.5	N/E

 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(9) / (22) Pages	
---	--	---	--

NEMA 250-2014			
Clause	Requirement + Test	Result - Remark	Verdict
5.11	Test for Protection Against Ingress of Water (Temporary Submersion)	Rated 4X	N/A
5.12	Test for Protection Against Ingress of Water (Prolonged Submersion)	Rated 4X	N/A
5.13	Oil Exclusion Test	Rated 4X	N/A
5.14	GASKET MATERIAL TESTS	The product itself(including gaskets) was conditioned at 70 °C for 168 hrs according to 5.14.3(Alternate Evaluation) before performing relevant required tests.	P
5.15	Test for Sharpness of Edges	No sharp edges	P

 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(10) / (22) Pages	
---	---	---	--

NEMA 250-2014			
Clause	Requirement + Test	Result - Remark	Verdict

Test Information

	Hose Down Test : Clause 5.7	P
--	------------------------------------	----------

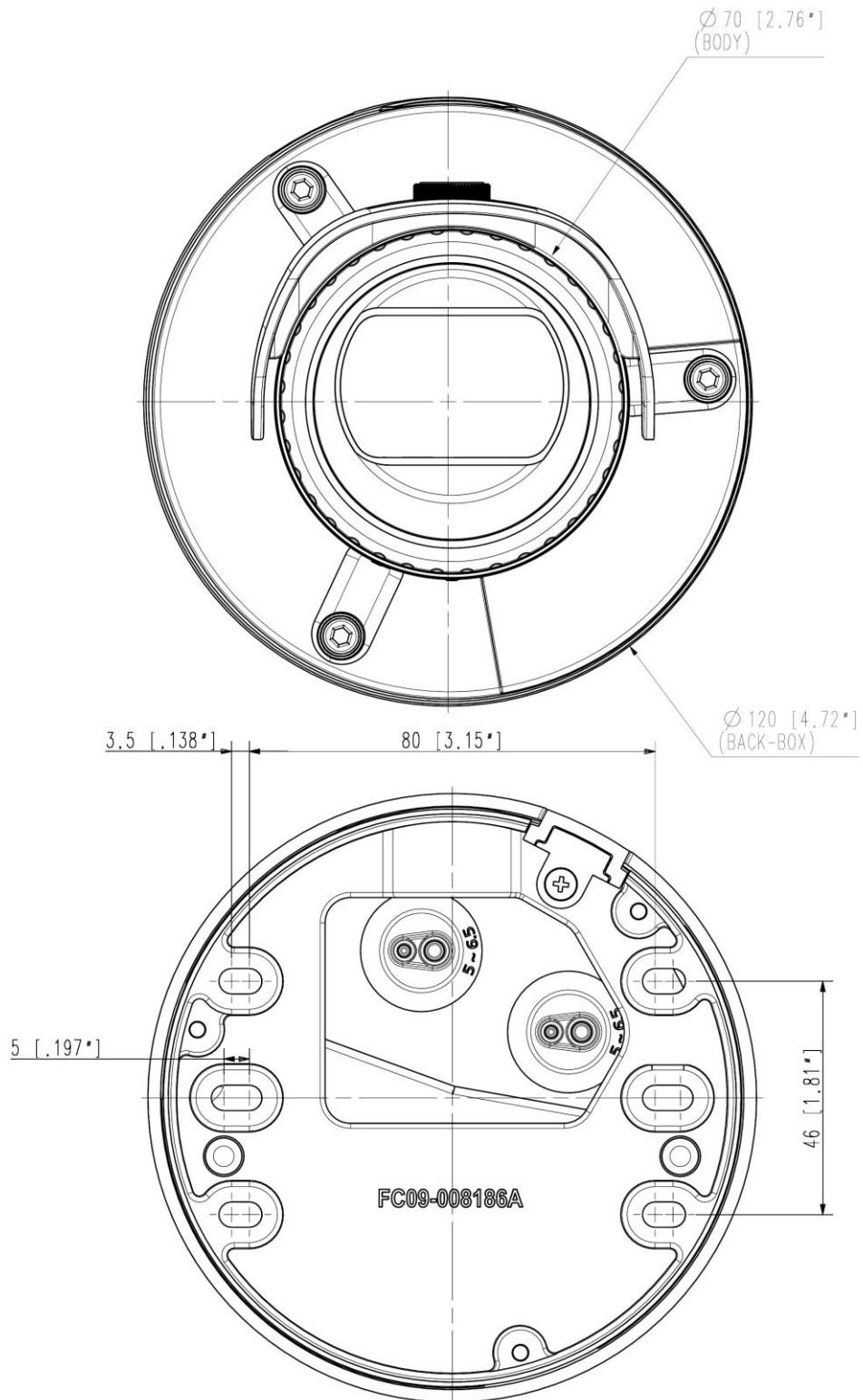
<u>Description of Test</u> The enclosure and its external mechanisms were subjected to a stream of water from a hose that has a 25.4 mm (1 in) inside diameter nozzle and delivers at least 240 L (65 gal) per minute. The nozzle was held from 3.0 to 3.5 m (10 to 12 feet) from the enclosure, and the spray of water was directed at all points of potential water entry such as seams, joints, external operating mechanisms, and such. The nozzle was moved along each test point one time at a uniform rate of 6 mm/sec(1/4 in/sec). Sample Dimension(70.0 mm by 70.0 mm by 296.0 mm) Test Duration = 135.2 secs <u>Acceptance conditions:</u> The enclosure shall be considered to have met the requirements if at the conclusion of the test no water has entered the enclosure <u>Test Results</u>			
Sample No (Model)	Water Flow	Presence of water inside	Result
XNO-6010RN	240 LPM	No	Pass

 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(11) / (22) Pages	
---	---	---	--

List of test equipment used:

Instr. Code	Instrument Type	Range Used	Mfr./Model	Calibration Date	
				Last	Due
S3-IP18	25.4mm Nozzle	25.4 mm	CTK/S3-IP18	-	Checked by calliper below before using
S1-SW2	Stop Watch	0.01 s	CASIO/ NONE	2016-03-16	2018-03-16
S1-D09	Steel Measuring Tape	5 m	KOMELON/KMC-74N	2013-06-11	2018-06-11
S3-IP20	Water flow meter	250LPM	Nuri tech/Z-4007	2016-02-23	2017-02-23
S1-D04	DIGITAL VERNIER CALIPER	150 mm	MITUTOYO/150 mm	2016-11-08	2017-11-08

Attachment 1 – Construction Diagram and installation method





CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, KOREA, REPUBLIC OF

Tel: +82-31-339-9970

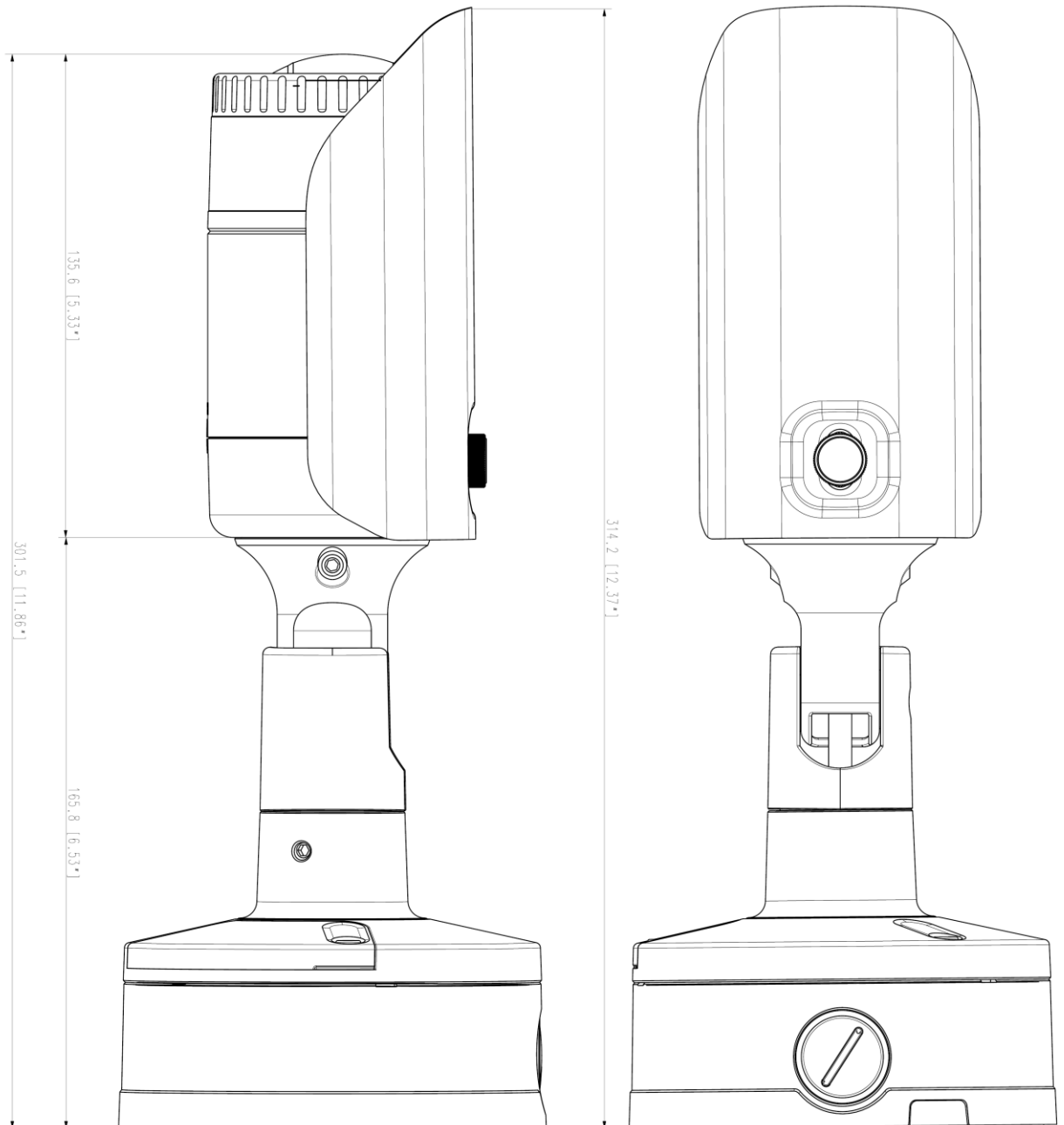
Fax: +82-31-624-9501

Report No.:

CTK-2017-00475

Page(13) / (22) Pages

Attachment 1 – Construction Diagram and installation method





CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, KOREA, REPUBLIC OF

Tel: +82-31-339-9970

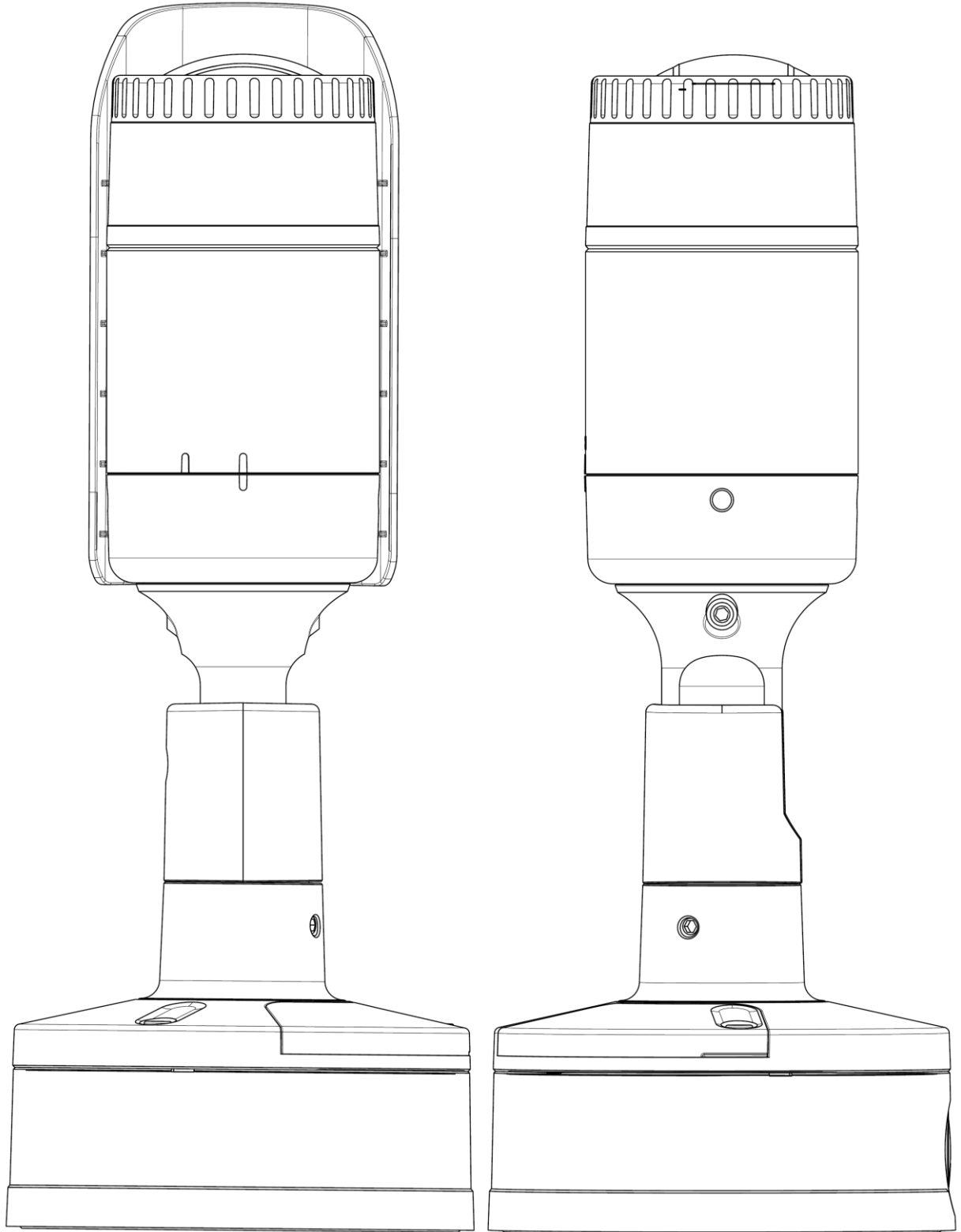
Fax: +82-31-624-9501

Report No.:

CTK-2017-00475

Page(14) / (22) Pages

Attachment 1 – Construction Diagram and installation method



 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(15) / (22) Pages	
---	---	--	--

Attachment 2 – Parts List

No	Assembly Unit							Part Number	Part Name	ea	Material Type
	1	2	3	4	5	6	c				
								(Part No.)	(Part Name)	(개)	
1	*							AM07-009195C	ASSY,FINAL-XNO-6010RN/EX	1	
2		*						AM07-009196A	ASSY,HALF-XNO-6010R	1	Aluminum
3			*					AM06-007007A	ASSY,PCB-XNO-6010R BACK-BOX	1	PCB
4			*					AM06-006832A	ASSY,PCB-XNO-6080R SD	1	PCB
5			*					FC15-005278A	COVER-SD CARD-XNO6080R;PC,INJECTION	1	PC
6			*					Z9642306007	MACHINE SCREW(M3xL6,Zn-B,넵비머리)	2	Steel-screw
7			*					EP02-003288B	CABLE-SNZ-6320 SMPS TO DRIVE FFC;FFC,30P	1	cable(inside)
8			*					AM07-009253A	ASSY-REAR-XNO-6010R	1	
9				*				EP02-004213A	HARNESS-XNO-6080;MCX,40P-40P,295MM	1	cable(inside)
10				*				EP02-004214A	HARNESS-XNO-6080R;WIRE,9P-9P,10P-10P,300	1	cable(inside)
11				*				FC39-001235B	BODY-PAN;ME6:ALUMINUM,821KA-ZJS-1200	1	Aluminum
12				*				Z6003007801A	MACHINE SCREW(FLAT HEAD/접시,M3xL6 Ni)	3	Steel-screw
13				*				FC39-000193C	BODY-TILT RIGHT;ALUMINUM, ANODIZING,821K	1	Aluminum
14				*				FC39-000192C	BODY-TILT LEFT;ALUMINUM, ANODIZING,821KA	1	Aluminum
15				*				Z6011000601A	HEXAGON_REC_M4L30	1	Stainless steel
16				*				Z6004041101A	SETSCREW_SRN_M6P1L6	2	Stainless steel
17				*				FC15-005367A	COVER-CABLE GASKET_XNO-6080R;ADC	1	Aluminum
18				*				FC18-003309A	SCREW-MACHINE-HSHC;4,0.7,20,DOUBLE SEMS,	3	Steel-screw
19				*				Z9642306007	MACHINE SCREW(M3xL6,Zn-B,넵비머리)	1	Steel-screw
20				*				RM01-003400A	WIRE,METALIC-SAFETY-SNO-8081R;STS 304	1	Stainless steel
21				*				HP07-001180A	GASKET-CABLE-XNO6080R;SILICON RUBBER	1	Rubber
22				*				Z6004041201A	SETSCREW_SRN_M6P1L10	1	Stainless steel
23				*				FC29-008986A	GUIDE-PANNING-XNO6020R;IVORY	1	PC
24				*				MC06-001053A	BUSHING-CABLE-XNO6020R	1	Rubber
25				*				FC39-003184A	BODY-CASE_SNO-L6083R;58,50,PC	1	Aluminum
26				*				HP07-001028A	GASKET-O-RING_D1-61.6_D2-2.62;2.62,VMQ(C	1	Rubber
27				*				FC29-008884A	CASE-TOP-BB-XNO6020R	1	Aluminum
28				*				FC28-002475A	DOOR-BB-XNO6020R	1	Aluminum
29				*				HP07-001200A	GASKET-DOOR-BB-XNO6020R	1	Rubber
30		*						AM07-006494I	ASSY-FRONT-XNO6010R-WISENET	1	
31			*					FC15-004200D	COVER-FRONT_XNO6010R_WISENET;ADC12,-,DAR	1	Aluminum
32			*					HP07-001029A	GASKET-O-RING_D1-53.64_D2-2.62;2.62,VMQ(	1	Rubber
33			*					AM07-009252A	ASSY,SUB-WINDOW-XNO6010R	1	PC
34				*				RM04-001043A	TAPE-WINDOW-XNO6010R	1	tape
35				*				FC37-001035A	WINDOW-CAMERA-XNO6010R	1	SABIC 143R
36				*				FC37-001036A	WINDOW-IR-HOOD-XNO6010R	1	LOTTE NH1035
37		*						PM02-003026A	DESIPAK-6G	2	Silicon
38		*						Z6803211501A	TAPE_1425	2	tape
39		*						Z6909023101A	GLASS_SHEET_4150	1	tape

 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(16) / (22) Pages	
---	--	--	--

Attachment 2 – Parts List

No	Assembly Unit							Part Number	Part Name	ea	Material Type
40	*							AM07-009197A	ASSY-LENS MODULE-XNO-6010R	1	
41		*						AM06-006950A	ASSY,PCB-XNO-6010R SENSOR	1	PCB
42		*						EP14-002020A	LENS-2.5MM FIXED	1	Glass
43		*						Z6031007302A	WAVE WASHER H3	1	Steel
44		*						FC29-008833B	HOLDER-LENS XNO6010R	1	Aluminum
45		*						EP07-001187B	FILTER,IR-MODULE AB(CABLE40MM)	1	Complex(electric)
46		*						Z6001055101A	SCREW-MACHINE;6001-001707,BH,+,M2,L4,ZP	2	Steel-screw
47		*						FC18-003435A	SCREW,MS-M1.7L4 CH;CH,0.35,4,NONE,0	1	Steel-screw
48		*						Z6003012201A	TAPTITE SCREW M2L5	2	Steel-screw
49		*						HP12-000632A	SEALRING-O-S10-SNB6010	1	Rubber
50		*						FC18-001201A	SPACER-T0.6 SNV6012M;A5052	1	Aluminum
51	*							AM07-009255A	ASSY,CASE BOTTOM-BB-XNO6010R	1	Aluminum
52		*						FC29-008886A	CASE-BOTTOM-BB-XNO6020R	1	
53		*						HP07-001201A	GASKET-CASE-BB-XNO6020R	1	
54		*						FC29-003420B	CAP-BOLT;ADC12,DARK GRAY	1	
55		*						FC18-001028A	O-RING;Ø2.8,OD27.5,SILICON,GRAY	1	
56		*						MC06-001042A	BUSHING-CABLE SET;SILICON,PNV-9080R	2	
57		*						Z9642306007	MACHINE SCREW(M3xL6,Zn-B,남비머리)	1	
58		*						FC09-006670A	BRACKET-WIRE-SNO-8081R;SUS304,1.2	1	
59		*						FC18-003309A	SCREW-MACHINE-HSHC;4,0.7,20,DOUBLE SEMS,	3	
60	*							Z6001055101A	SCREW-MACHINE;6001-001707,BH,+,M2,L4,ZP	2	Steel-screw
61	*							AM06-006952E	ASSY,PCB-XNO-6010RP/EX NETWORK	1	PCB
62	*							AM06-007003A	ASSY,PCB-XNO-6010R POWER	1	PCB
63	*							FC28-000761A	PAD-THERMAL PAD GP 3000S30 30X30 2	1	Silicon
64	*							FC28-000556A	PAD-THERMAL,W30,D45,T2;GP1500,2	1	Silicon
65	*							Z6001055201A	SCREW-MACHINE;6001-001708,BH,+,M2,L5,ZP	8	Steel-screw
66	*							EP07-001192A	SINK,HEAT-WN5-XNO-NW-PCB	1	Aluminum
67	*							Z3809041501A	FFC CABLE-FLAT;3809-002506,60V,105C,52,	1	cabl(e)inside)
68	*							EP16-002345A	FPCB-XNO-6080R;2L,50PIN(0.5PITCH),E	1	cabl(e)inside)
69	*							AM07-009559A	ASSY,LED-XNO-6010R	1	
70		*						AM06-006954A	ASSY,PCB-XNO-6010R IR LED	1	PCB
71		*						EP07-001203A	SINK,HEAT-LED-XNO6020R	1	Aluminum
72		*						FC15-005535A	COVER-IR-XNO6010R;PC	1	PC
73		*						FC37-001037A	WINDOW-IR-XNO6010R	1	PC
74		*						Z6003019601A	SCREW-TAPTYPE;6003-001438,BH,+,B,M2,L6,	2	Steel-screw
75		*						EP02-000818A	HARNESS-SND-1080 SMPS TO REAR 6P	1	cabl(e)inside)
76	*							FC09-008188A	BRACKET-MAIN-XNO6020R	1	Aluminum
77	*							AM07-009256A	ASSY,BASE-WALL-MOUNT-XNO6010R	1	Aluminum



CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, KOREA, REPUBLIC OF

Tel: +82-31-339-9970

Fax: +82-31-624-9501

Report No.:

CTK-2017-00475

Page(17) / (22) Pages

Attachment 2 – Parts List

LOTTE
ADVANCED MATERIALS

UL 인증 | 롯데첨단소재

INFINO	Grade	NH-1035
iq.ul.com		
Component - Plastics [guide info]		E115797
Lotte Advanced Materials Co Ltd		
56 Gosan-ro, Uiwang-si Gyeonggi-do 437-711 KR		
NH-1035(+)		
Polycarbonate (PC), "INFINO", furnished as pellets		
Color	Min Thk (mm)	Flame Class
ALL	1.5	V-0
	2.0-2.7	V-0, 5VB
Comparative Tracking Index (CTI): -		RTI
Dielectric Strength (kV/mm): -		Elec
High-Voltage Arc Tracking Rate (HVTR): -		Imp
Dimensional Stability (%): -		Str
(+) - May be replaced by one, two, or three numbers and/or letter(s)		
ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.		
Report Date: 1998-08-24		
Last Revised: 2008-02-15		
		© 2016 UL LLC
UL US		
IEC and ISO Test Methods		
Test Name	Test Method	Units
Flammability	IEC 60695-11-10, IEC 60695-11-20	Class (color)
		Thk (mm)
		Value
		1.5
		V-0 (ALL)
		2.0-2.7
		V-0, 5VB (ALL)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C
IEC Comparative Tracking Index	IEC 60112	Volts (Max)
IEC Ball Pressure	IEC 60695-10-2	C
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C
ISO Tensile Strength	ISO 527-2	MPa
ISO Flexural Strength	ISO 178	MPa
ISO Tensile Impact	ISO 8256	kJ/m ²
ISO Izod Impact	ISO 180	kJ/m ²
ISO Charpy Impact	ISO 179-2	kJ/m ²

COPYRIGHT © 2016 by LOTTE ADVANCED MATERIALS CO., LTD. ALL RIGHTS RESERVED.

UL_226755_20170223

 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(18) / (22) Pages	
---	--	---	--

Attachment 3 – Photographs

<Photo 1 > Test Unit



<Photo 2 > Test Unit



 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(19) / (22) Pages	
---	--	---	--

Attachment 3 – Photographs

<Photo 3 > Hose down test



<Photo 4 > Test Result



 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(20) / (22) Pages	
---	--	---	--

Attachment 3 – Photographs

<Photo 5 > Test Result



<Photo 6 > Test Result





CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, KOREA, REPUBLIC OF

Tel: +82-31-339-9970

Fax: +82-31-624-9501

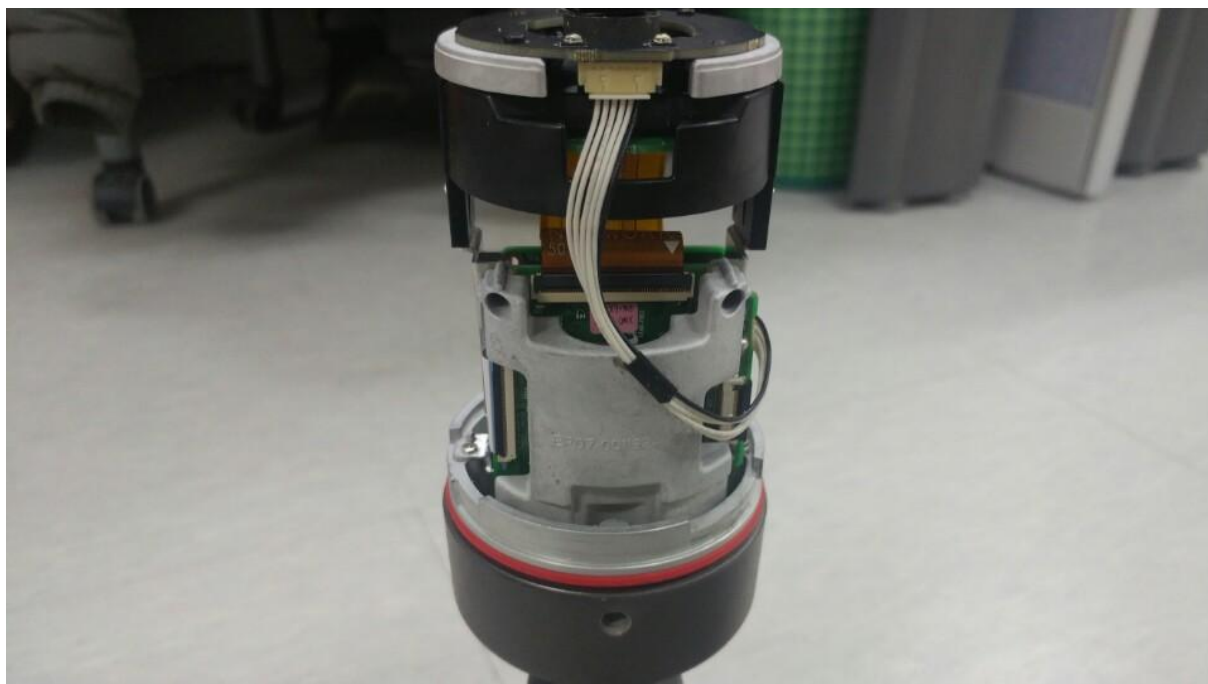
Report No.:

CTK-2017-00475

Page(21) / (22) Pages

Attachment 3 – Photographs

<Photo 7 > Test Result



<Photo 8 > Test Result



 CTK Co., Ltd. The Prime Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	Report No.: CTK-2017-00475 Page(22) / (22) Pages	
---	--	---	--

Attachment 3 – Photographs

<Photo 9 > Test Result



<Photo 10 > Test Result

