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Please note, Follow-Up Procedure Revisions or Report Revisions do not include Authorization Pages, Indices, Section General, and/or Appendices unless revisions were required or requested.

Should you have any questions, after reviewing the material, or need to report any inaccuracies, please reach out to your UL representative or find UL contact details for your local Customer Service Department at https://www.ul.com/about/locations.

Please find attached the related material

For your convenience, the below describes the related updates:

Oracle Project Number 4790654470

E158873-volX13-Index
E158873-20230417-CertificateofCompliance
E158873-A6162-DescriptionUL
Figure-14-Total
E158873-A6162-TestRecordUL

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Times change, Trust Remains™

File		Volume	Page	Date:
E158873	Index	X13	1	17-Apr-23

Index

Product Type	Model/Type Reference	Report Reference #	Status
NETWORK VIDEO RECORDER	XRN-6410B4, XRN-3210B4	E158873-A6027-UL	
NETWORK VIDEO RECORDER	PRN-6410B4, PRN-3210B4, XRP-4210B4, PRN-6400B4, PRN-3200B4	E158873-A6028-UL	
NETWORK VIDEO RECORDER	XRN-6410DB4	E158873-A6029-UL	
NETWORK VIDEO RECORDER	PRN-6410DB4, XRP-4310DB4, PRN-6400DB4	E158873-A6030-UL	
NETWORK CAMERA	PNM-9002VQ	E158873-A6031-UL	
NETWORK CAMERA	XNF-9010RV, XNF-9010RVM, XNF-9010RS	E158873-A6032-UL	
NETWORK CAMERA	PNM-9000QB	E158873-A6033-UL	
NETWORK CAMERA	XNP-9300RW, XNP-8300RW, XNP-6400RW	E158873-A6034-UL	
NETWORK CAMERA	TNV-8010C, TNV-8011C	E158873-A6035-UL	
OUTDOOR NETWORK CAMERA	PNM-8082VT	E158873-A6036-UL	
THERMAL CAMERA	TNM-3620TDY	E158873-A6037-UL	
DIGITAL VIDEO RECORDER	HRX-1621* (* is Blank or N or P : P=PAL, N=NTSC)	E158873-A6038-UL	
NETWORK CAMERA	PNM-9022V	E158873-A6039-UL	
NETWORK CAMERA	PNM-9322VQP	E158873-A6040-UL	
DIGITAL VIDEO RECORDER	HRX-821* (* is Blank or N or P : P=PAL, N=NTSC)	E158873-A6041-UL	
NETWORK I/O BOX	SPM-4210	E158873-A6042-UL	
NETWORK VIDEO RECORDER	XRN-2011*, XRN-2010*, XRN-3010*, XRN-1610*, XRN-2010P/DM, XRN-3010P/DM, XRN-3010A, XRN-2011A, XRN-2010A, XRN-1610A (* is blank or N or P: N=NTSC, P=PAL)	E158873-A6043-UL	
PUBLIC VIEW MONITOR	SMT-2730PV	E158873-A6044-UL	
PUBLIC VIEW MONITOR	SMT-3230PV	E158873-A6045-UL	
CAMERA HOUSING	SHB-9000H	E158873-A6046-UL	
PUBLIC VIEW MONITOR	SMT-1030PV	E158873-A6047-UL	
NETWORK CAMERA	XNP-9250R, XNP-8250R, XNP-6400R	E158873-A6049-UL	
NETWORK CAMERA	XNP-9250, XNP-8250, XNP-6400	E158873-A6050-UL	
NETWORK CAMERA	ONO-9081R	E158873-A6051-UL	
NETWORK CAMERA	ONV-9081R	E158873-A6052-UL	
NETWORK VIDEO RECORDER	XRN-1620B2	E158873-A6053-UL	

NETWORK VIDEO RECORDER	XRN-1620SB1	E158873-A6054-UL	
NETWORK VIDEO RECORDER	XRN-820S	E158873-A6055-UL	
NETWORK CAMERA	SCO-6020	E158873-A6056-UL	
NETWORK CAMERA	TNF-9010	E158873-A6057-UL	
NETWORK VIDEO RECORDER	PRN-3210B2, PRN-1610B2, XRN-6410RB2, XRN-3210RB2, XRN-6410B2, XRN-3210B2, PRN-3200B2, PRN-3205B2, PRN-1600B2, PRN-1605B2	E158873-A6058-UL	
NETWORK CAMERA	PNB-A6001	E158873-A6059-UL	
NETWORK CAMERA	PND-A6081RV, PND-A6081RF	E158873-A6060-UL	
NETWORK CAMERA	PNO-A6081R	E158873-A6061-UL	
LENS MODULE	SLA-T2480*, SLA-T2480V*, SLA-T4680*, SLA-T4680V*, SLA-T4680D, SLA-T4680DW, SLA-T4680DS, SLA-T2415, SLA-T2815B, SLA-T2480A, SLA-T2480VA, SLA-T4680A, SLA-T4680VA (* is blank or N or P: N = NTSC, P=PAL)	E158873-A6062-UL	
NETWORK CAMERA	PNV-A6081R	E158873-A6063-UL	
NETWORK CAMERA	XNB-6001*, XNB-H6240A, XNB-H6242A	E158873-A6064-UL	
NETWORK THERMAL CAMERA	TNO-3030T, TNO-3020T, TNO-3010T, TNO-3040T, TNO-3050T	E158873-A6067-UL	
NETWORK CAMERA	QNP-6320, QNP-6250, QNP-6251	E158873-A6068-UL	
NETWORK CAMERA	QNP-6320H, QNP-6250H, QNP-6251H	E158873-A6069-UL	
NETWORK CAMERA	XNV-C9083R, XNV-C8083R, XNV-C7083R, XNV-C6083R, XNV-C6083	E158873-A6070-UL	
NETWORK CAMERA	TID-600R	E158873-A6071-UL	
DIGITAL VIDEO RECORDER	HRX-1632, HRX-835	E158873-A6072-UL	
LED MONITOR	SMT-4343	E158873-A6073-UL	
NETWORK CAMERA	TNO-7180R, TNO-7180RLP	E158873-A6075-UL	
NETWORK CAMERA	XND-C9083RV, XND-C8083RV, XND-C7083RV, XND-C6083RV	E158873-A6076-UL	
NETWORK CAMERA	PNM-9031RV	E158873-A6077-UL	
NETWORK CAMERA	QNO-7082R	E158873-A6078-UL	
NETWORK CAMERA	QND-7082R	E158873-A6080-UL	
NETWORK CAMERA	QNV-7082R	E158873-A6081-UL	
NETWORK CAMERA	XNO-C9083R, XNO-C8083R, XNO-C7083R, XNO-C6083R	E158873-A6082-UL	
NETWORK CAMERA	XNV-9083R, XNV-8083R, XNV-8093R, XNV-6083R	E158873-A6083-UL	
NETWORK CAMERA	XND-9083RV, XND-8083RV, XND-8093RV, XND-6083RV	E158873-A6084-UL	
NETWORK CAMERA	QNO-7032R, QNO-7022R, QNO-7012R	E158873-A6088-UL	

NETWORK CAMERA	XNB-9003, XNB-8003, XNB-6003	E158873-A6089-UL	
NETWORK CAMERA	XNO-9083R, XNO-8083R, XNO-6083R	E158873-A6091-UL	
NETWORK CAMERA	QNV-7012R, QNV-7022R, QNV-7032R	E158873-A6092-UL	
NETWORK CAMERA	QND-7012R, QND-7022R, QND-7032R	E158873-A6093-UL	
NETWORK CAMERA	QNP-6320R, QNP-6250R	E158873-A6094-UL	
NETWORK CAMERA	XNV-6123R	E158873-A6100-UL	
NETWORK CAMERA	XNO-6123R	E158873-A6101-UL	
NETWORK CAMERA	LNO-6072R	E158873-A6102-UL	
NETWORK CAMERA	LNV-6012R, LNV-6022R, LNV-6032R, ANV-L6012R	E158873-A6103-UL	
NETWORK CAMERA	LNV-6072R	E158873-A6104-UL	
NETWORK CAMERA	LND-6012R, LND-6022R, LND-6032R	E158873-A6105-UL	
NETWORK CAMERA	LND-6072R	E158873-A6106-UL	
NETWORK CAMERA	LNO-6012R, LNO-6022R, LNO-6032R, ANO-L6012R, ANO-L6022R	E158873-A6107-UL	
NETWORK CAMERA	ANO-L7022R, ANO-L7012R	E158873-A6108-UL	
NETWORK CAMERA	TNV-7010RC, TNV-7011RC	E158873-A6109-UL	
NETWORK CAMERA	ANV-L7012R	E158873-A6110-UL	
NETWORK CAMERA	XNZ-6320A	E158873-A6111-UL	
NETWORK CAMERA	QNP-6320HS	E158873-A6112-UL	
NETWORK CAMERA	PNM-A9083RVD, PNM-A7083RVD, PNM-C12083RVD, PNM-C7083RVD	E158873-A6113-UL	
NETWORK VIDEO RECORDER	ARN-1610S	E158873-A6114-UL	
NETWORK CAMERA	XNZ-L6320A	E158873-A6115-UL	
NETWORK VIDEO RECORDER	QRN-1630S, XRN-815S	E158873-A6116-UL	
NETWORK CAMERA	ANO-L7082R, ANO-L6082R	E158873-A6117-UL	
THERMAL NETWORK CAMERA	TNM-C4940TD, TNM-C4950TD, TNM-C4960TD	E158873-A6118-UL	
NETWORK CAMERA	ANE-L7012R, ANE-L6012R	E158873-A6119-UL	
NETWORK CAMERA	PNM-12082RVD, PNM-7082RVD	E158873-A6120-UL	
NETWORK CAMERA	ANV-L7082R, ANV-L6082R	E158873-A6121-UL	
DIGITAL VIDEO RECORDER	HRX-1635	E158873-A6122-UL	
DIGITAL VIDEO RECORDER	HRX-835A	E158873-A6123-UL	
NETWORK CAMERA	XNF-9013RV	E158873-A6124-UL	
NETWORK VIDEO ENCODER	SPE-1630	E158873-A6125-UL	
NETWORK VIDEO RECODER	QRN-430S, ARN-410S	E158873-A6126-UL	
NETWORK VIDEO RECORDER	XRN-420S	E158873-A6127-UL	

NETWORK VIDEO RECODER	QRN-830S	E158873-A6128-UL	
NETWORK VIDEO RECORDER	ARN-810S	E158873-A6129-UL	
NETWORK CAMERA	XNV-9083RZ, XNV-8083RZ, XNV-6083RZ	E158873-A6130-UL	
DIGITAL VIDEO RECORDER	HRX-434	E158873-A6131-UL	
NETWORK CAMERA	XNV-8083Z, XNV-6083Z	E158873-A6132-UL	
NETWORK VIDEO ENCORDER	SPE-420	E158873-A6133-UL	
NETWORK CAMERA	XNB-6002	E158873-A6134-UL	
DIGITAL VIDEO RECORDER	HRX-435	E158873-A6135-UL	
DIGITAL VIDEO RECORDER	HRX-1634	E158873-A6136-UL	
VIDEO DECODER	SPD-152	E158873-A6137-UL	
NETWORK CAMERA	PNM-C9022RV	E158873-A6138-UL	
PENDANT SPEAKER	SPA-P100W, SPA-P100B	E158873-A6139-UL	
SECURITY LED MONITOR	SMT-2212	E158873-A6140-UL	
DIGITAL VIDEO RECORDER	ARD-1610	E158873-A6142-UL	
DIGITAL VIDEO RECORDER	ARD-810, ARD-410	E158873-A6144-UL	
NETWORK CAMERA	PNV-A6081R-E2T, PNV-A6081R-E1T	E158873-A6150-UL	
USB JOYSTICK CONTROLLER	SPC-2001	E158873-A6151-UL	
NETWORK CAMERA	MGC-D8080LI, MGC-D8080	E158873-A6153-UL	
NETWORK CAMERA	QNO-C9083R, QNO-C8083R	E158873-A6154-UL	
NETWORK CAMERA	QNV-C9083R, QNV-C8083R	E158873-A6155-UL	
NETWORK CAMERA	XNP-C9253R, XNP-C8253R, XNP-C6403R	E158873-A6159-UL	
NETWORK CAMERA	XNP-C9253, XNP-C8253, XNP-C6403	E158873-A6160-UL	
NETWORK CAMERA	TNV-C7013RC	E158873-A6161-UL	
NETWORK CAMERA	MGC-F9010LI	E158873-A6162-UL	

CERTIFICATE OF COMPLIANCE

Certificate Number	UL-CA-2314903-0
Report Reference	E158873-20230417
Date	19-Apr-2023
Issued to:	Hanwha Vision Co Ltd 6, Pangyo-ro 319beon-gil, Bundang-gu Seongnam-si, Gyeonggi-do 13488 Republic of Korea
This is to certify that representative samples of	AZOT7 - Audio/Video, Information and Communication Technology Equipment Certified for Canada See Addendum Page for Product Designation(s). Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	CSA C22.2 No. 62368-1:19, 3rd Ed., Issue Date: 2019-12-13, Revision Date: 2021-10-22
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Deborah Jennings-Conner, VP Regulatory Services

UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number UL-CA-2314903-0
Report Reference E158873-20230417
Date 19-Apr-2023

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
MGC-F9010LI	NETWORK CAMERA

Deborah Jennings-Conner, VP Regulatory Services

UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number	UL-US-2317025-0
Report Reference	E158873-20230417
Date	19-Apr-2023
Issued to:	Hanwha Vision Co Ltd 6, Pangyo-ro 319beon-gil, Bundang-gu Seongnam-si, Gyeonggi-do 13488 Republic of Korea
This is to certify that representative samples of	AZOT - Audio/Video, Information and Communication Technology Equipment See Addendum Page for Product Designation(s). Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	UL 62368-1, 3rd Ed., Issue Date: 2019-12-13, Revision Date: 2021-10-22
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

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Look for the UL Certification Mark on the product.

Deborah Jennings-Conner, VP Regulatory Services

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CERTIFICATE OF COMPLIANCE

Certificate Number UL-US-2317025-0
Report Reference E158873-20230417
Date 19-Apr-2023

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
MGC-F9010LI	NETWORK CAMERA

Deborah Jennings-Conner, VP Regulatory Services

UL LLC

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UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements)
Certification Type:	Listing
CCN:	AZOT, AZOT7 (Audio/video, Information and Communication Technology Equipment)
Complementary CCN:	N/A
Product:	NETWORK CAMERA
Model:	MGC-F9010LI
Rating:	12 Vdc, 1.5 A or PoE (53 Vdc), 0.38 A
Applicant Name and Address:	HANWHA VISION CO LTD 6, PANGYO-RO 319BEON-GIL, BUNDANG-GU SEONGNAM-SI GYEONGGI-DO 13488 KOREA

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

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Prepared By: Lawrence Lee / Project Handler Reviewed By: SeulKi Park / Reviewer

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Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

A. Authorization - The Authorization page may include additional Factory Identification Code markings.

B. Generic Inspection Instructions -

i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.

ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.

iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

NETWORK CAMERA is designed for outdoor or indoor use, wall or ceiling use with mounting brackets.

It is a commercial equipment supplied from UL listed PoE (Power over Ethernet) and installed by service personnel.

Model Differences

N/A

Test Item Particulars

Product group	end product
Classification of use by	Instructed person
Supply Connection	not mains connected: ES1
Supply tolerance	None
Supply connection – type	12 Vdc or PoE (Power over Ethernet)
Considered current rating of protective device	N/A
Equipment mobility	wall/ceiling-mounted
Over voltage category (OVC)	OVC I
Class of equipment	Class III
Special installation location	N/A
Pollution degree (PD)	PD 2
Manufacturer’s specified Tma (°C)	55 Outdoor: minimum -20
IP protection class	IP 66
Power systems	not AC mains
Altitude during operation (m)	2000 m or less
Altitude of test laboratory (m)	2000 m or less
Mass of equipment (kg)	1.58

Technical Considerations

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer’s specification of : 55 °C
- The product is intended for use on the following power systems : No direct connection

- Considered current rating of protective device as part of the building installation (A) : N/A
- Mains supply tolerance (%) or absolute mains supply : No direct connection
- The Risk Group of a lamp or lamp system (including LEDs) is : Exempt
- The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual
- The outdoor equipment/enclosure was evaluated for use in an ambient range of : -20 °C to 55 °C

Additional Information

4790654470
- Maximum Normal Load: Continuous operation (Operate the camera through networked equipment with LED on and USB loaded at 0.5 A)

Additional Standards

The product fulfills the requirements of: N/A

Markings and Instructions

Clause Title	Marking or Instruction Details
Equipment identification marking – Manufacturer identification	Listee’s or Recognized Company’s name, Trade Name, File Number
Equipment identification marking – model identification	Model Number
Equipment rating marking – ratings	Input Ratings (voltage, dc, current)
Outdoor enclosure type	"Rainproof", IP66
Hard Copy	A. IMPORTANT or ATTENTION or similar wording B. Please check 'Manuals' from out website, before connecting to the supply. C. Company website URL (https://www.~~)
Website Manual - 1	This product is intended to be supplied by a UL Listed Power Supply Unit marked “Class 2” or “LPS” or “PS2” and rated from 12 Vdc, 1.5 A or PoE (53 Vdc), 0.38 A.
Website Manual - 2	The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802.3.af or IEEE 802.3.at shall be a UL Listed device with the output evaluated as a Limited Power Source as defined in UL60950-1 or PS2 as defined in UL62368-1.

Special Instructions to UL Representative

N/A

BD1.0	TABLE: Production-Line Testing Requirements					
BD1.1	**Electric Strength Test Special Constructions – Refer to Generic Inspection Instructions, Part AC for further information.**					
Model	Component	Removable parts	Test probe location	Test V rms	Test V dc	Test Time, s
N/A	N/A	N/A	N/A	N/A	N/A	N/A
BD1.2	**Earthing Continuity Test Exemptions – This test is not required for the following models:**					
	All model					
BD1.3	**Electric Strength Test Exemptions – This test is not required for the following models:**					
	All model					
BD1.4	**Electric Strength Test Component Exemptions – The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test.**					
	All model					

BE1.0	Sample and Test Specifics for Follow-Up Tests at UL				
Model	Component	Material	Test	Sample (s)	Test Specifics
N/A	N/A	N/A	N/A	N/A	N/A

4.1.2	TABLE: List of critical components					Pass
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Product Category CCN(s)	Mark(s) of conformity	Supplement ID
Enclosure - Top (Metal)	Interchangeable	Interchangeable	Aluminium, Min. 2.0 mm thickness, See enclosure for dimension.	-	-	
Enclosure - Transparent Dome Cover (Plastic)	MITSUBISHI ENGINEERING-PLASTICS CORP	S-2000V+(f1)	Min. 2.0 mm thickness, rated Min. V-2, 115 deg. C	QMFZ2/8	UL (E41179)	
Enclosure -Front Cover side Enclosure (Plastic)	LOTTE CHEMICAL CORPORATION	QC-122(+)(f1)	Min. 2.5 mm thickness, rated Min. V-2, 125 deg. C	QMFZ2	UL (E115797)	
Enclosure -Inter (Plastic)	LOTTE CHEMICAL CORPORATION	QC-122(+)(f1)	Min. 2.5 mm thickness, rated Min. V-2, 125 deg. C	QMFZ2	UL (E115797)	
Mounting Bracket (Metal)	Interchangeable	Interchangeable	Aluminium, Min. 3.0 mm thickness	-	-	
Internal Enclosure (Metal)	Interchangeable	Interchangeable	Aluminium, Min. 2.0 mm thickness. see enclosure for dimension.	-	-	
Transformer(T3)	SHENZHEN GROUP-TEK ELECTRONICS TECHNOLOGY CO. , LTD	PDT25125SR SR	130 deg. C, See enclosure for more detail.	-	-	
Line Filter (T2, T4)	SHENZHEN GROUP-TEK ELECTRONICS TECHNOLOGY CO. , LTD	PCM10029R	6 mH, 125 deg. C, See enclosure for more detail.	-	-	
Opto-coupler (LS1)	LITE-ON TECHNOLOGY CORP	LTV-816	Isolation Voltage: 5300. Max. Operation Temperature:110 deg. C	FPQU2	UL (E113898)	

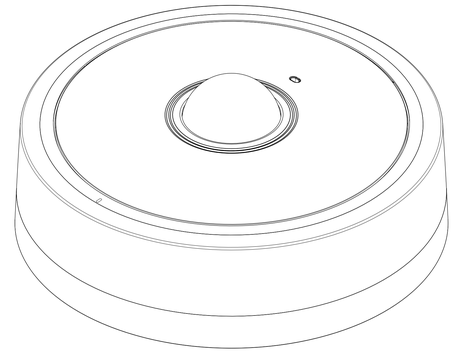
Lithium Battery (BAT1)	SEIKO INSTRUMENTS INC MICRO-ENERGY DIV	ML414H	Lithium (Coin), Rechargeable, Max 3.4Vdc, Maximum charging current 300mA	BBCV2	UL (MH15628)	
Lithium Battery Protection circuit	Interchangeable	Interchangeable	Diode (D1, 85 V, 300 mA) and Resistor (R84, 3.3Kohm) in series	-	-	
Fuse (F1)	LITTELFUSE INC	499*	125V, 1.5 A	JDYX2	UL (E10480)	
USB protect IC (U15)	TEXAS INSTRUMENTS INCORPORATED	TPD3S014	Rated 4.5-5.5 Vdc, 0.5 A, Current limit: 1.05 A	QVGS2	UL (E169910)	
Internal wiring	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1; Min. 30 V, 80 deg. C	AVLV2	UL	
Thermal Pad	KOMOTECH CO LTD	KGP-1(a)	Min. 1.0 mm thickness, rated V-0, 150 deg. C	QMFZ2	UL (E245303)	
Connectors and Receptacles (Secondary circuits)	Interchangeable	Interchangeable	-	ECBT2	UL	
Connectors and Receptacles (Secondary circuits) -Alternate	Interchangeable	Interchangeable	Copper alloy pins housed in bodies of plastic rated Min. V-2	QMFZ2	UL	
PWB	EXPRESS ELECTRONICS LTD	14MV0	Min. V-0, 130 deg. C.	ZPMV2	UL (E157925)	
PWB - Alternate	Interchangeable	Interchangeable	Min. V-0, 130 deg. C	ZPMV2	UL	
Gasket- Between Top case and Inner window / Between Top case and bottom case / Between Inner	Namyang Vina	O-VMQ-30-BK	Gasket Test was conducted under E158873-A6034	-	-	

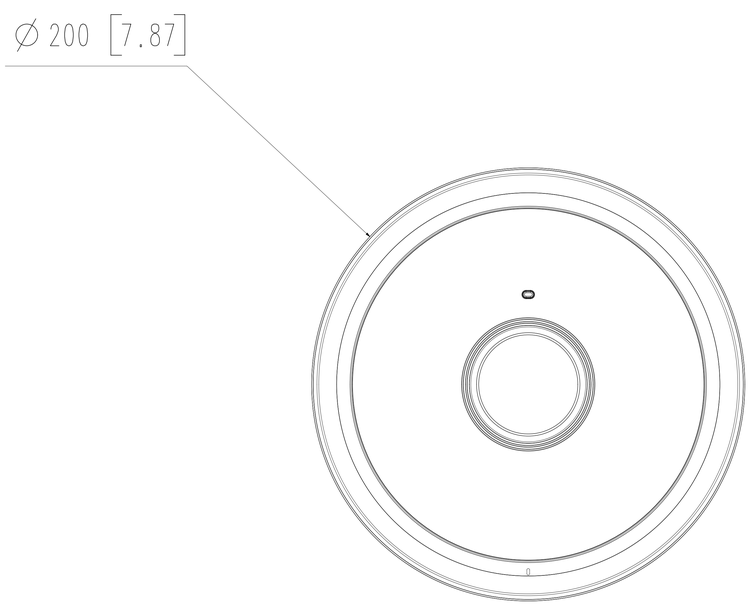
window and bottom case)						
Gasket- Between Top case and Dome cover	Namyang Vina	O-VMQ-50-BK	Gasket Test was conducted under E158873-A6034	-	-	
Gasket (BUSH CABLE)	Namyang Vina	C-VMQ-60-GR	Gasket Test was conducted under E158873-A6034	-	-	
Gasket (BUSH CABLE FLEXIBLE)	Namyang Vina	C-VMQ-40-GR	Gasket Test was conducted under E158873-A6034	-	-	
Outdoor Label	Interchangeable	Interchangeable	Max Temp 100 deg. C, Min Temp -40 deg. C,	PGDQ2 or PGJL2	UL	
IR LED (24 EA, LD1-LD24)	LITE-ON Technology Corp.	LTST-G563ZEGBW	Vf=2.9 Vdc (max / RED), Vf=3.4 Vdc (max / Green,Blue)	-	-	

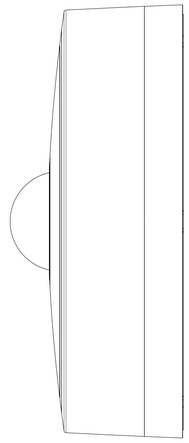
Enclosures

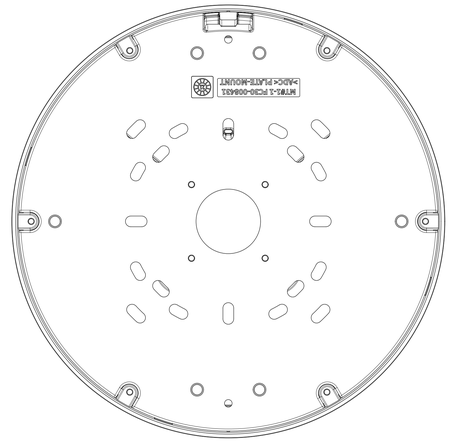
Type	Supplement Id	Description
Photographs	03-01	External View - 1
Photographs	03-02	External View - 2
Photographs	03-03	Internal View
Photographs	03-04	Camera Lens View
Photographs	03-05	LED Board View
Photographs	03-06	Sensor Board - Top
Photographs	03-07	Sensor Board - Bottom
Photographs	03-08	Network Board - Top
Photographs	03-09	Network Board - Bottom
Diagrams	04-01	Diagram
Manuals	06-01	Manual
Miscellaneous	07-01	Transformer (T3) Specification
Miscellaneous	07-02	Line Filter (T2, T4) Specifiation
Miscellaneous	07-03	Label

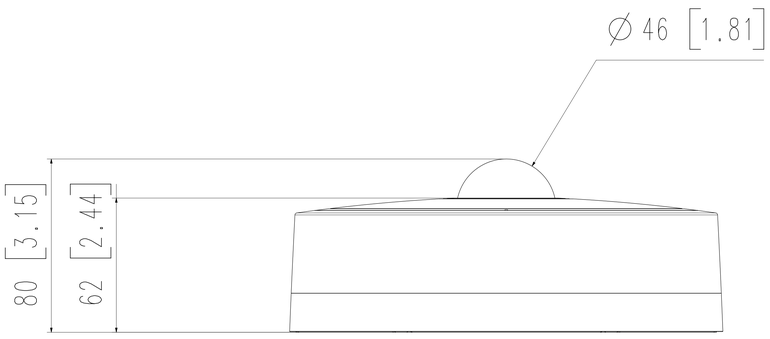
The following Page(s) are related to Diagrams-01. The next supplement, if applicable, will be identified with a new Supplement Page Heading.











3	MODEL2	
2	MODEL1	
1	MGC-F9010LI	'22.11.24
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/1	Hanwha Techwin

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A0

The following Page(s) are related to Manuals-01. The next supplement, if applicable, will be identified with a new Supplement Page Heading.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean the contaminated area on the product surface with a soft, dry cloth or a damp cloth.
   (Do not use a detergent or cosmetic products that contain alcohol, solvents or surfactants or oil constituents as they may deform or cause damage to the product.)
7. Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/ accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lighting storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This product is intended to be supplied by a UL Listed Power Supply Unit marked "Class 2" or "LPS" or "PS2" and rated from 12Vdc, 1.5A, / PoE+(53Vdc), 0.38A.
16. This product is intended to be supplied by isolation power.
17. If you use excessive force when installing the product, the camera may be damaged and malfunction.
    If you forcibly install the product using non-compliant tools, the product may be damaged.
18. Do not install the product in a place where chemical substances or oil mist exists or may be generated. As edible oils such as soybean oil may damage or warp the product, do not install the product in the kitchen or near the kitchen table.
    This may cause damage to the product.
19. When installing the product, be careful not to allow the surface of the product to be stained with chemical substance.
    Some chemical solvents such as cleaner or adhesives may cause serious damage to the product's surface.
20. If you install/disassemble the product in a manner that has not been recommended, the production functions/ performance may not be guaranteed.
    Install the product by referring to "Installation & connection" in the user manual.
21. Installing or using the product in water can cause serious damage to the product.
22. Although a rapid change in temperature could cause frost inside the dome, there will be no problem with the video.
23. This device has been verified using STP cable. The use of appropriate GND grounding and STP cable is recommended to effectively protect your product and property from transient voltage, thunderstroke, communication interruption.
24. MGC-F9010LI is compatible with the parking guidance server (for MGS model) equipped with the MGM Server software.
25. The operating temperature of the product is -20°C to +55°C (-4°F ~ +131°F).

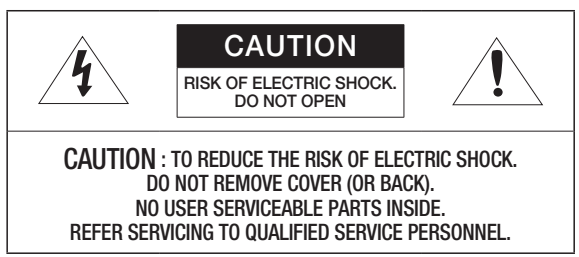
WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENNINGS ON THE EQUIPMENT.

Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

To prevent injury, this apparatus must be securely attached to the Wall/ceiling in accordance with the installation instructions.

CAUTION



EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Class I construction

An apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.

Battery

Batteries(battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

The battery cannot be replaced.

Disconnection Device

Disconnect the main plug from the apparatus, if it's defected. And please call a repair man in your location.

When used outside of the U.S., it may be used HAR code with fittings of an approved agency is employed.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

ATTENTION

IL Y A RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UNE BATTERIE DE TYPE INCORRECT.
METTRE AU REBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS.

CAUTION

These servicing instructions are for use by qualified service personnel only.
To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

The Micro USB port of the product is provided for easier installation, and is not recommended for monitoring purposes.

Please use the input power with just one camera and other devices must not be connected.

Before connecting the Power Terminal Block, you need to unplug the power plug from the outlet first.

The ITE is to be connected only to PoE networks without routing to the outside plant.

The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802.3.at shall be a UL Listed device with the output evaluated as a Limited Power Source as defined in UL60950-1 or PS2 as defined in UL62368-1.

Unit is intended for installation in a Network Environment 0 as defined in IEC TR 62102. As such, associated Ethernet wiring shall be limited to inside the building.

Please read the following recommended safety precautions carefully.

- Do not place this apparatus on an uneven surface.
- Do not install on a surface where it is exposed to direct sunlight, near heating equipment or heavy cold area.
- Do not place this apparatus near conductive material.
- Do not attempt to service this apparatus yourself.
- Do not place a glass of water on the product.
- Do not install near any magnetic sources.
- Do not block any ventilation openings.
- Do not place heavy items on the product.
- Please wear protective gloves when installing/removing the camera.
  The high temperature of the product surface may cause a burn.

User's Manual is a guidance book for how to use the products.

The meaning of the symbols are shown below.

- Reference : In case of providing information for helping of product's usages
- Notice : If there's any possibility to occur any damages for the goods and human caused by not following the instruction

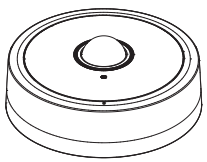
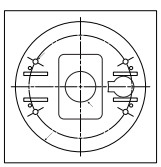
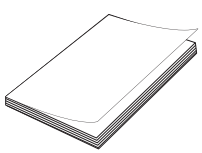
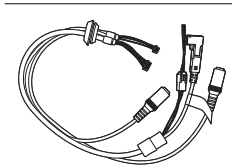
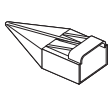
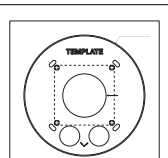
※ Please read this manual for the safety before using of goods and keep it in the safe place.

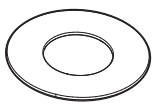
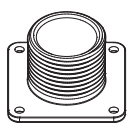
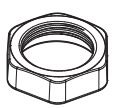
We do not guarantee the quality of third-party products (e.g. lenses, accessories) that you separately purchase.

In particular installation environments, there might be interference in radio communications. When interference of electromagnetic waves occurs between the product and radio communication device, it is recommended to keep a certain distance between the two or change the direction of the receiving antenna.

WHAT'S INCLUDED

Please check if your camera and accessories are all included in the product package.
(As for each sales country, accessories are not the same.)

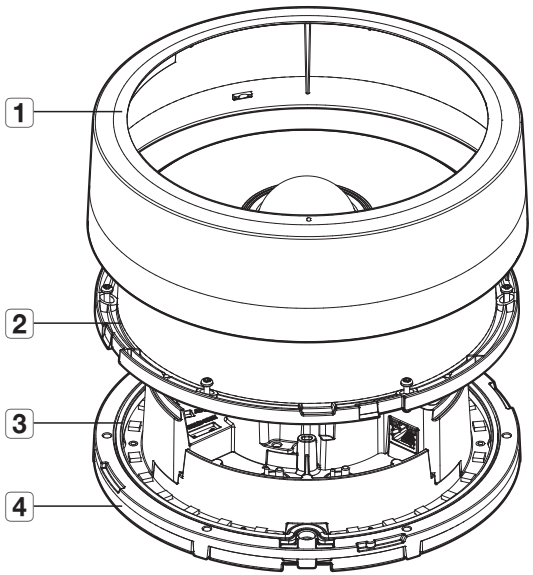
Appearance	Item Name	Quantity	Description
	Camera	1	
	Template for raceway bracket	1	Guide when installing on the raceway bracket
	Quick Guide (Optional)	1	
	Audio/Alarm/Power cable	1	Used for audio, alarm, DC 12V power supply
	Cap Installer	1	Used to connect the network cable
	Mounting template	1	Guide when installing on a ceiling or mount

Appearance	Item Name	Quantity	Description
	Screw	2	Used when assembling the mount plate to the camera body
	Mount plate rubber	1	Used when installing the camera on the raceway
	Mounting adapter for raceway	1	
		1	
	Screw	2	

■ Use installation screws of at least M4, L30 for the installation of this product.

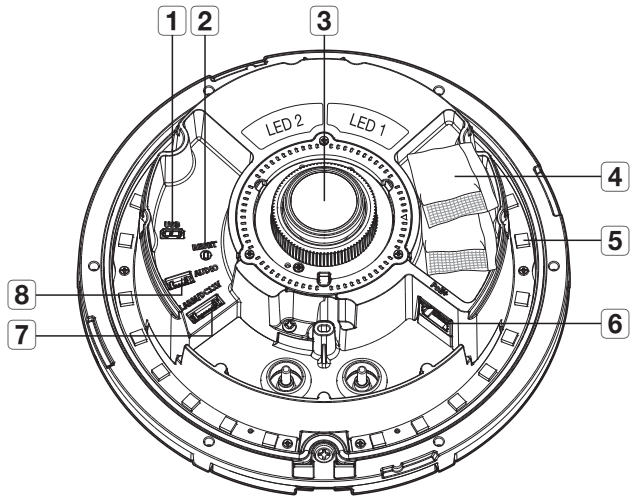
AT A GLANCE

Appearance



Item	Description
1 Light cover	Used to protect the camera and light from external shocks.
2 Top case	Case cover used to protect the lens and the main unit.
3 Camera body	Body part where the camera lens and connection terminals are included.
4 Mount plate	Used to fix the raceway or separately purchased mount.

Inside



Item	Description
1 MICRO USB port	Port to connect the WiFi dongle. You can check the installation video through the applications installed in the smartphone. Refer to "**Connecting WiFi**" on page 20. ▪ Wifi dongle and OTG adapter are sold separately.
2 Reset Button	The button restores all camera settings to the factory default. Press and hold for about 5 seconds to reboot the system. If you reset the camera, the network settings will be adjusted so that DHCP can be enabled. If there is no DHCP server in the network, you must run the Device Manager program to change the basic network settings such as IP address, Subnet mask, Gateway, etc., before you can connect to the network.
3 Fisheye lens	This lens has 360˚ vision and it can record video panoramically.
4 Absorbent	Used to remove moisture from the top case to prevent frosting.
5 LED light	Lights in various colors depending on the detected parking situation.

INSTALLATION

- This camera is waterproof and in compliance with the IP66 spec, but the jack connected to the external cable is not. You are recommended to install this product below the edge of eaves to prevent the cable from being externally exposed.

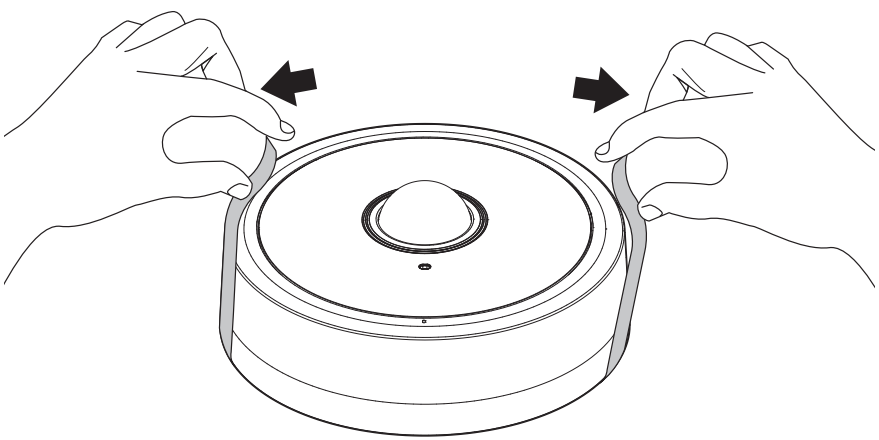
Precautions before installation

Ensure you read out the following instructions before installing the camera:

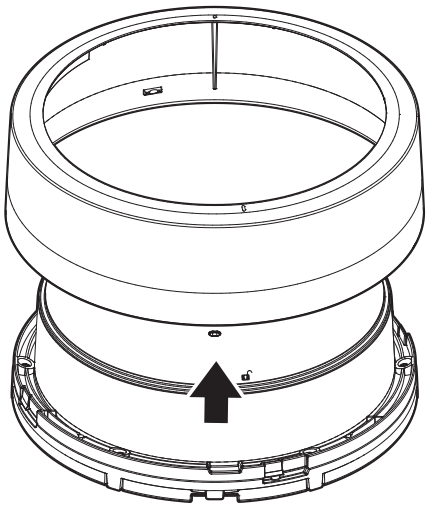
- Select an installation site that can hold at least 5 times the camera's weight.
- Stuck-in or peeled-off cables can cause damage to the product or a fire.
- For safety purposes, keep anyone else away from the installation site. And put aside personal belongings from the site, just in case.
- If the product is installed with excessive force, it may cause damage to the camera due to malfunction. Forcing assembly using non-compliant tools may damage the product.

Disassembling

1. Remove the tapes that fix the mount plate, top case, and light cover.

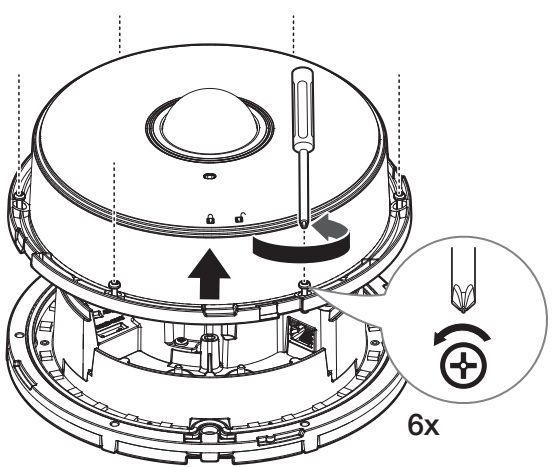


2. Remove the light cover by lifting it up.

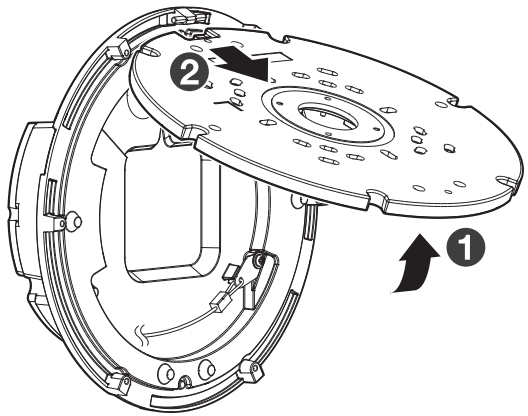


3. Remove the body protective cover by unfastening the 6 screws counterclockwise using a Phillips screwdriver.

- It is not required to completely remove screws from the cover.

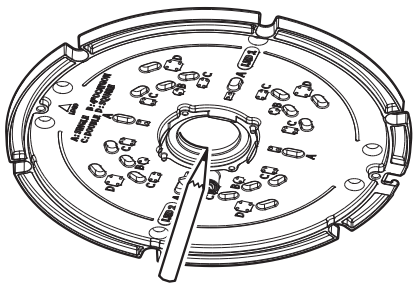


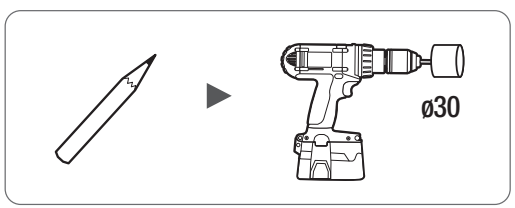
4. Lift the mount plate obliquely and then remove it.



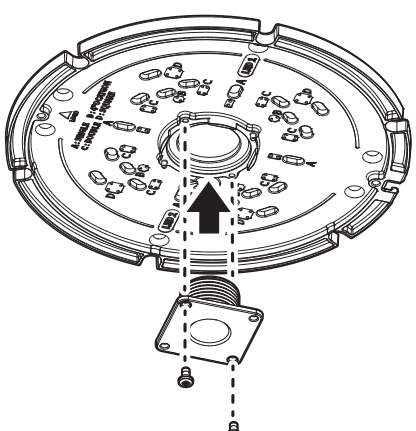
Installing on the raceway (mount plate)

1. On the raceway, mark the place where the provided raceway mounting adapter is to be inserted, and then drill a hole for it.

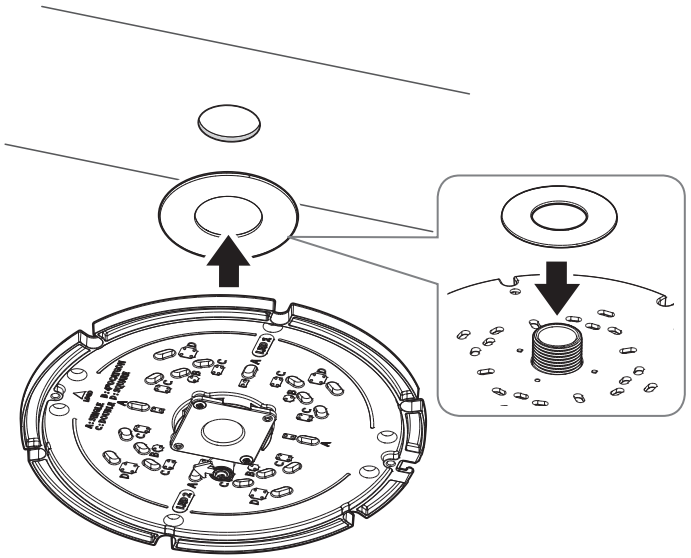




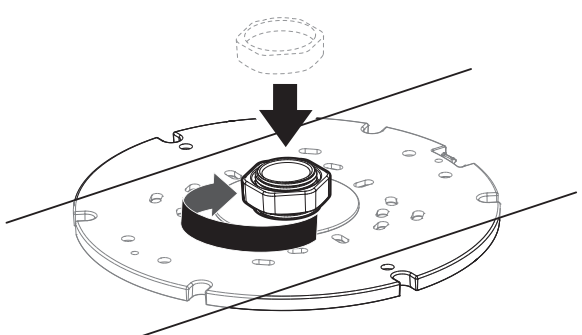
2. Fix the mounting adapter to the mount plate with the provided 2 screws.



3. Place the mount plate rubber onto the upper part of the mounting adapter, and then insert it into the drilled hole.



4. At the top of the raceway, insert the mounting adapter nut into the adapter to complete the mount plate installation.

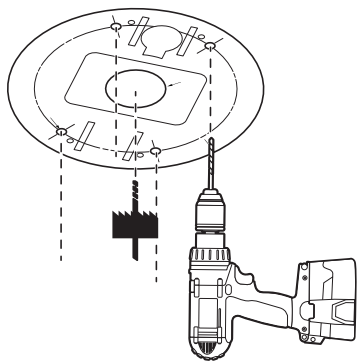


5. Pull out the cables for audio/alarm/power and the network cable through the mounting adapter.

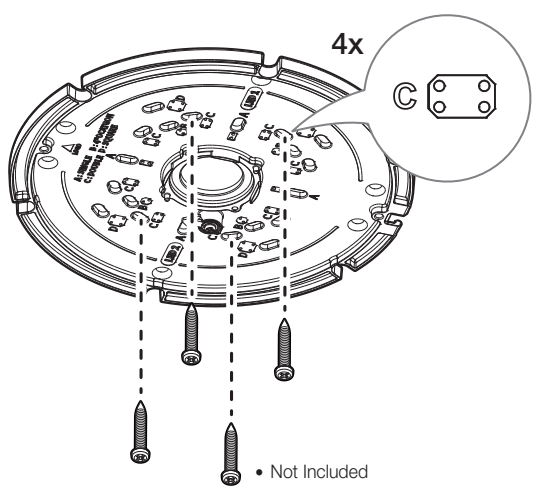
Installing on the raceway bracket or structure (mount plate)

[Installing on the raceway bracket]

1. Attach the mounting template to the raceway bracket and drill the holes for screws and cables.

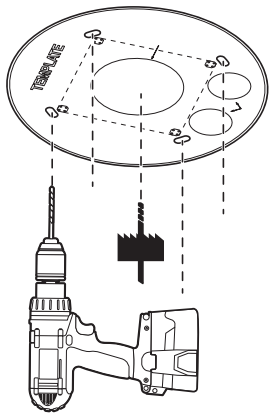


2. Fix the mount plate with screws.
3. Pull out the cables for audio/alarm/power and the network cable through the mount plate.

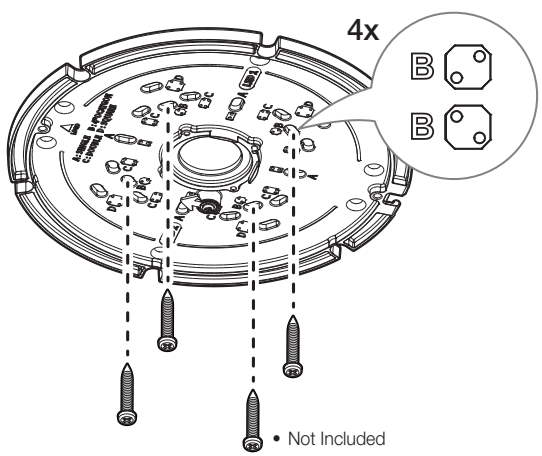


[Installing on the ceiling or structure]

1. Attach the mounting template on the desired place and then drill the holes for screws and cables.

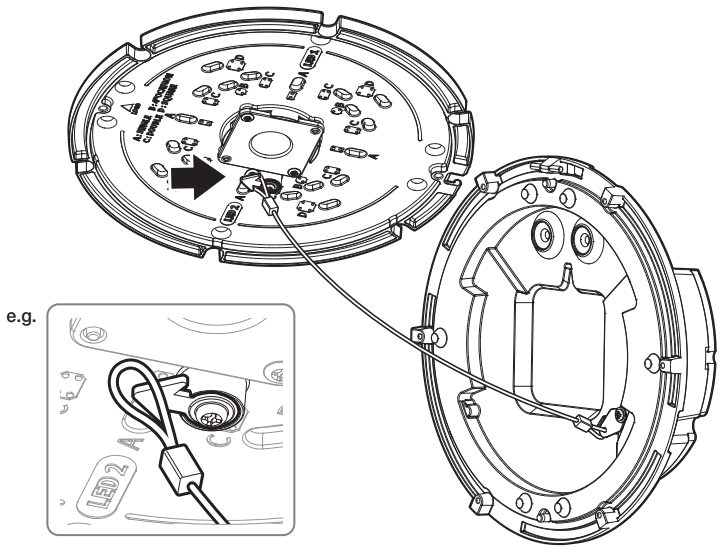


2. Fix the mount plate with screws.
3. Pull out the cables for audio/alarm/power and the network cable through the mount plate.

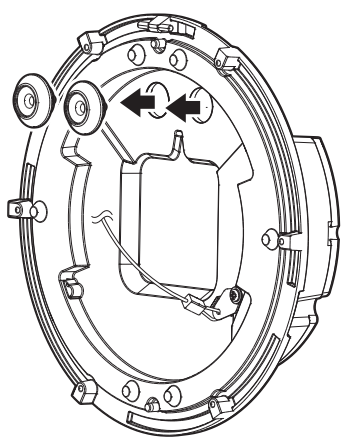


Mounting the camera body

1. Hang the safety wire up on a hook that looks like an arrow in the mount plate.



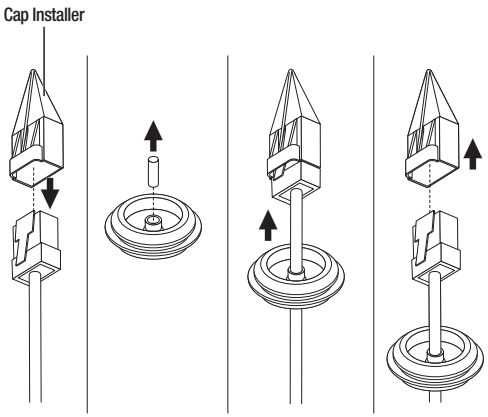
2. Remove the cable bushing from the camera body.



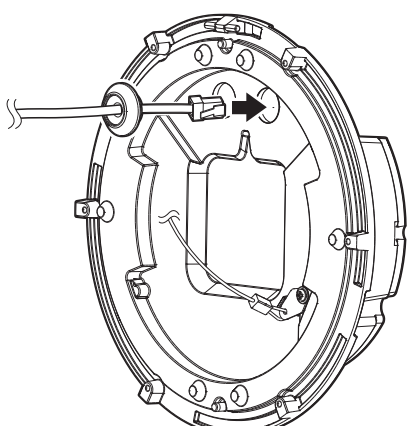
[Installing the network cable]

3. Remove the protruding part on the removed cable bushing.

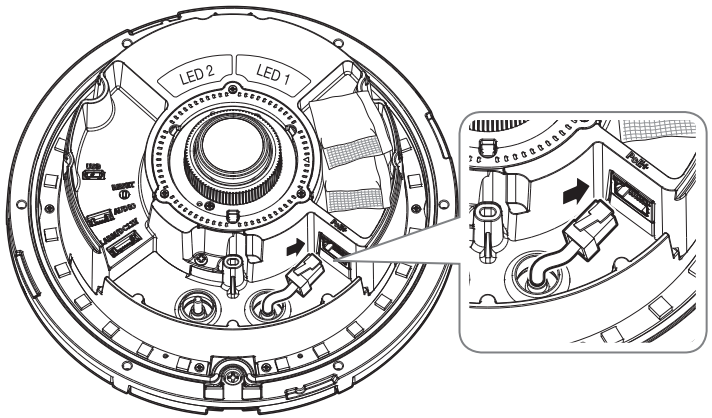
4. Pass the network cable through using the cab installer.



5. Insert the cable bushing of the network cable into the camera body.

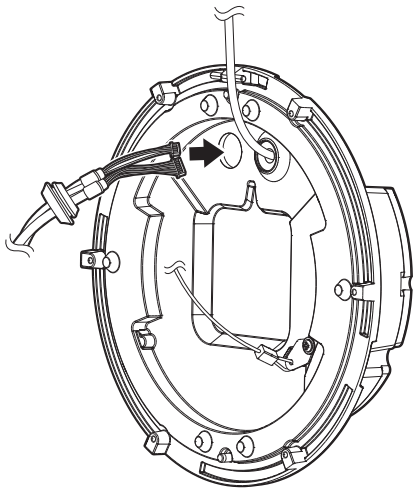


6. Connect the connector of the network cable to the camera's PoE+ port.

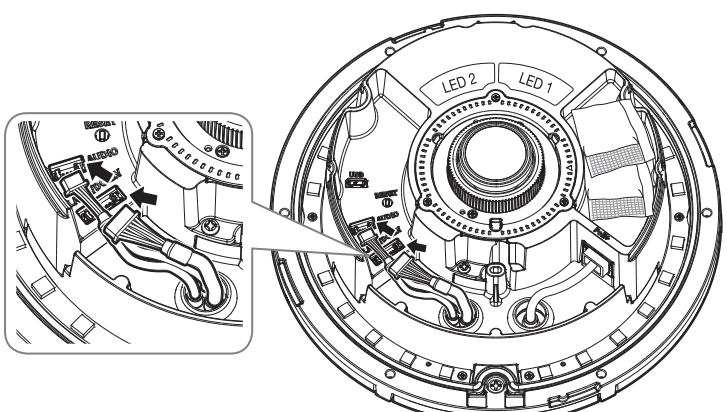


[Installing the Audio/Alarm/Power cables]

7. Mount the cable bushing of the provided audio/alarm/power cables to the camera body.

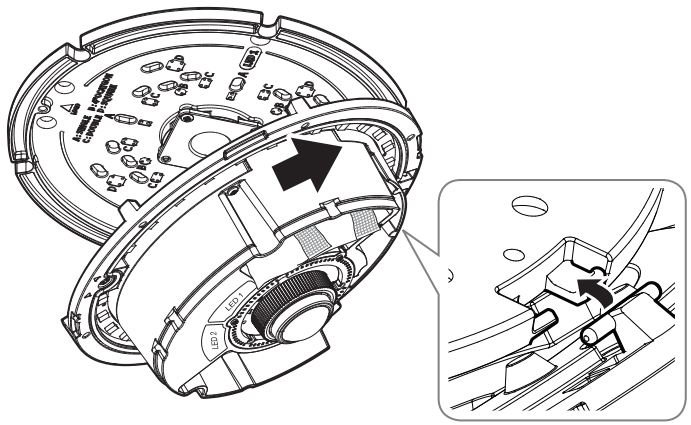


8. Connect the small terminal part of the audio/alarm/power cable to the audio cable port, and then connect the large terminal part to the alarm I/O and power (DC 12V) port.

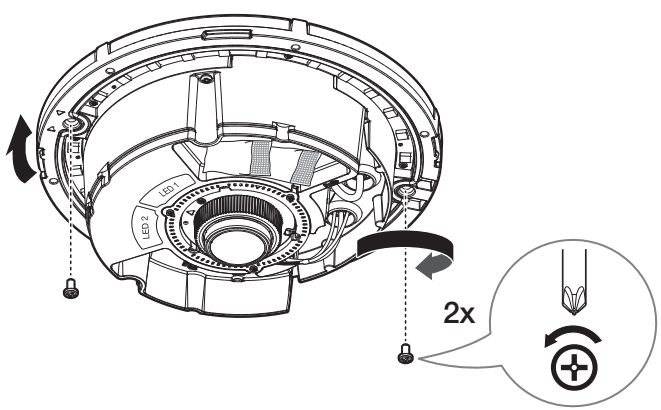


9. Insert the camera body into the mount plate.

- Align with the hinges as shown in the figure and then insert it.



10. Lift the camera body and then fix it to the mount plate with the provided 2 fastening screws.

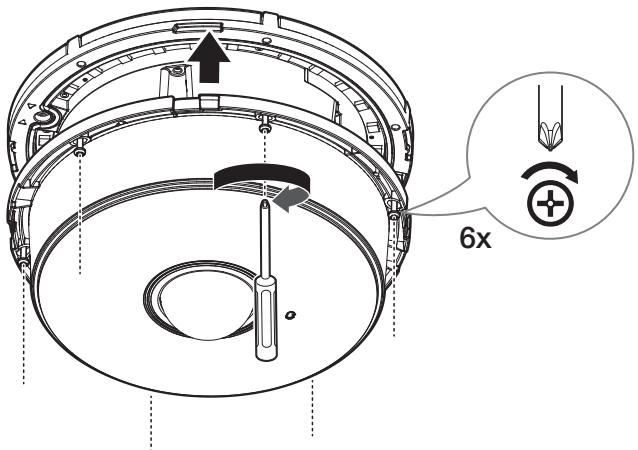


11. Adjust the lens to the desired direction with reference to "**Adjusting the monitoring direction for the camera**" section. (page 17)

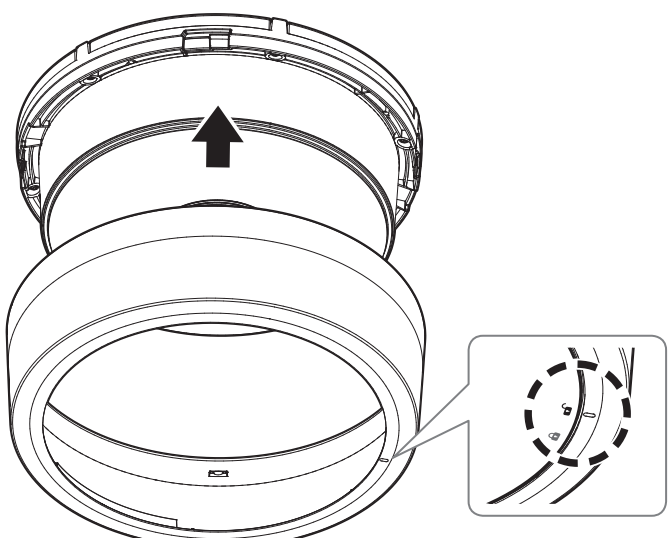
- Connect a monitoring device to the USB port and then monitor and adjust it. (page 19)

Assembling the cover

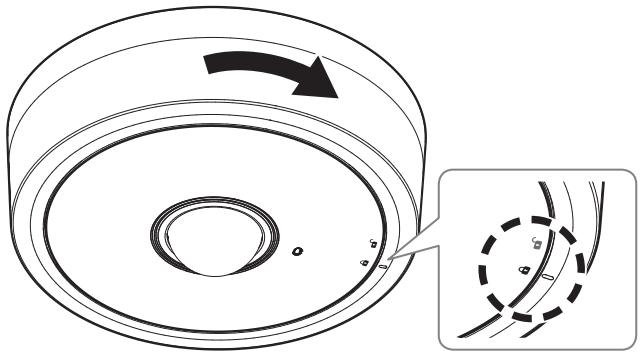
1. Turn the 6 fixing screws for the body protection cover clockwise using a Phillips screwdriver to fix the body protection cover.



2. Align the direction guide on the light cover with the unlock mark on the top case and then push it in.



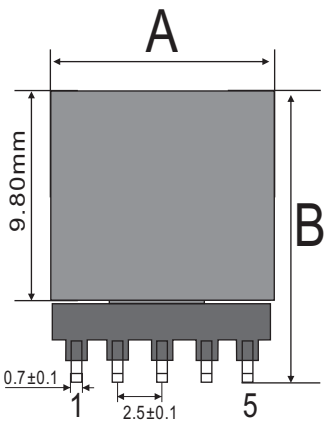
3. Turn the light cover in the arrow direction for mounting.



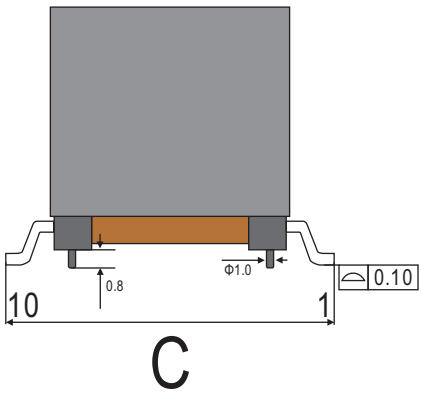
The following Page(s) are related to Miscellaneous-01. The next supplement, if applicable, will be identified with a new Supplement Page Heading.

2. Mechanical Dimensions:

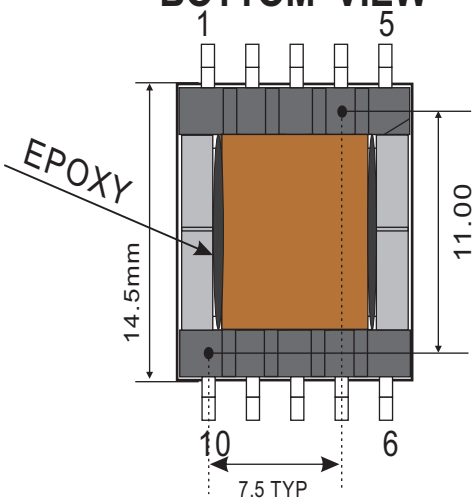
FRONT VIEW



SIDE VIEW



BOTTOM VIEW



Note:

1.Wrap 2Ts of 7mm kapton tape around the finished part.

2.Fixed the cores with glue,and fixed the case with glue.

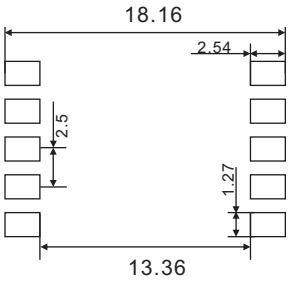
Unit: mm

A MAX	B MAX	C MAX
15.2	14.8	17.8

Laser Marking information

PDT25125SR GROUP-TEK
• YYWW

Suggested PCB Paad Layout



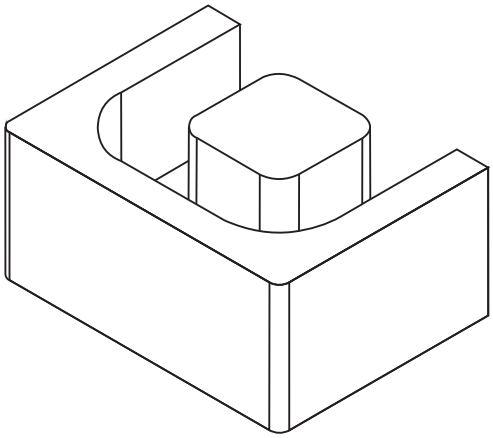


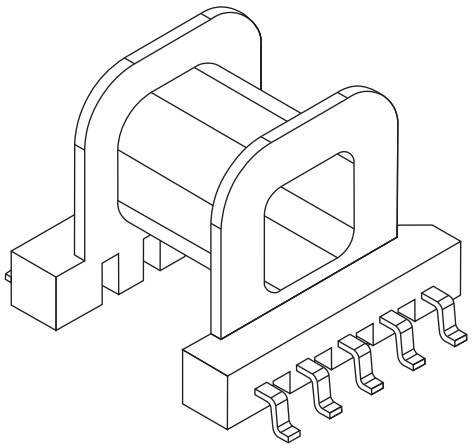
5.Winding Information:

WINDING SEQ.	ST-FN	WIRE/FOIL	TURNS	WRAP INSUL.	MARGIN TAPE	SLEEVE	NOTE
P1-1	1--3	4*0.21mm 2UEW	16	1T w8.0mm (kapton tape)	N/A	N/A	1
S1-1	9--6	4*0.27mm 2UEW (Red)	6	1T w8.0mm (kapton tape)	N/A	N/A	1
P1-2	1--3	2*0.21mm 2UEW (Natural)	16	1T w8.0mm (kapton tape)	N/A	N/A	1
S1-2	10--7	4*0.27mm 2UEW	6	1T w8.0mm (kapton tape)	N/A	N/A	1
P2	4--5	3*0.17mm 2UEW	6	2T w8.0mm (kapton tape)	N/A	N/A	1

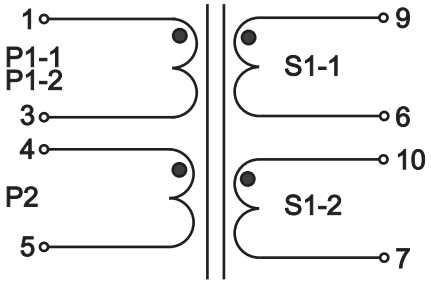
NOTE :

1. -Place the bobbin pin 1 left side of operator.

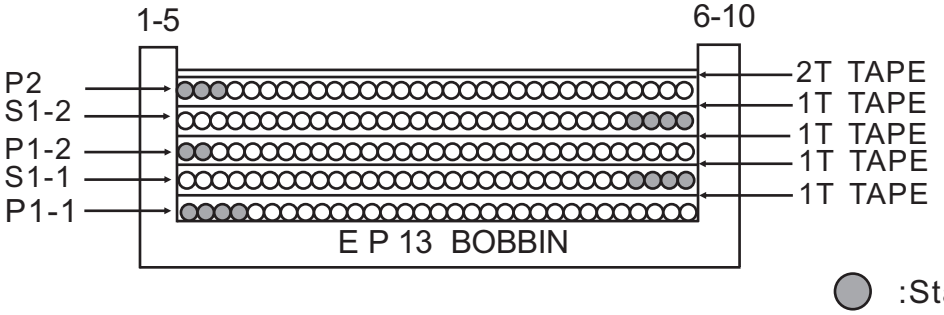




6.Schematic:



7.Winding construction



:Start terminal

8.Material List:

NO.	ITEM.	MATERIALS	SUPPLIERS/MANUFAXTURES	UL FILE NO.
1	BOBBIN	PHENOLIC T375J UL RATING: 94V-0 THERMAL RATING:150°C	CHANG CHUN PLASTIC CO LTD.	QMFZ2.E59481
2	CORE	Tp2A	TTS Technology Co.,Ltd.	N/A
3	WIRE	POLYURETHANE ENAMELED TYPE NO: 2UEW THERMAL RATING:180°C	ZHU HAI SUNTEK WIRE COLTD	OBMW2.E234867
4	TAPE	ADHESIVE POLYESTER TAPE TYPE NO.:CT*(c)(g) THERMAL RATING:130°C yellow tape : for inner coils	JingJiang yahua pressure sensitive glue Co.,Ltd	.E165111
5	SOLDER	SN/CU: 99.3/0.7	Gao Xin stannum industry Co., Ltd	N/A
6	Glue	E-500(xx)	Dong Guan city eatto electronic material Co., Ltd	E218090
7	CASE	PHENOLIC T375J UL RATING: 94V-0 THERMAL RATING:150°C	CHANG CHUN PLASTIC CO LTD.	QMFZ2.E59481

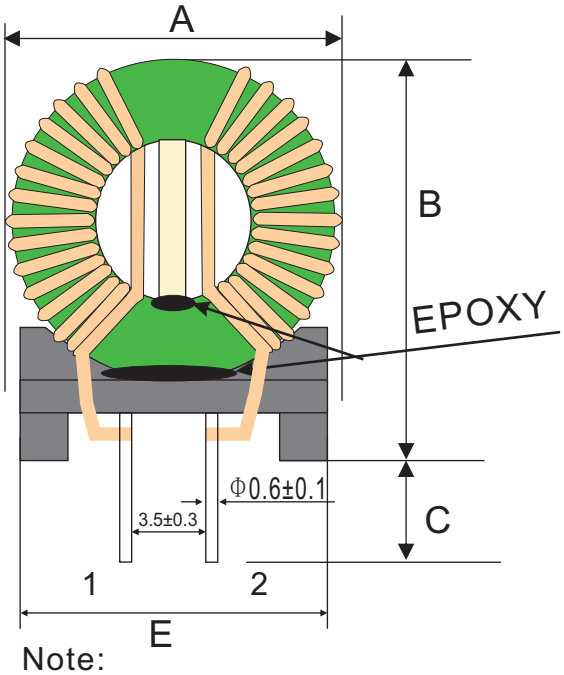
9.PACKING INFORMATION:

DESCRIPTION	QTY
PIECES PER REEL	150
PIECES PER POCKET	1
PIECES PER BOX	450
REEL PER BOX	3
GROSS WEIGHT PER BOX(KG)	TBD
NET WEIGHT PER BOX(KG)	TBD

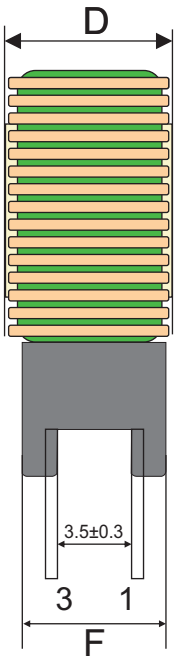
The following Page(s) are related to Miscellaneous-02. The next supplement, if applicable, will be identified with a new Supplement Page Heading.

2. Mechanical Dimensions:

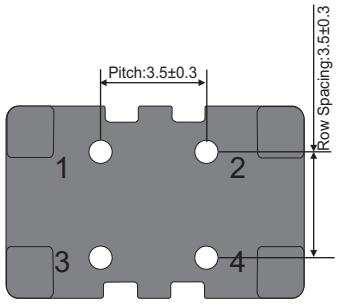
FRONT VIEW



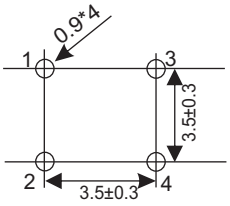
SIDE VIEW



BOTTOM VIEW



PCB LAYOUT



Note:
1.Fix epoxy for PCB and BASE.

Unit: mm

A +/-1.0	B +/-0.5	C +/-0.5	D +/-1.0	E +/-0.5	F +/-0.5
12.0	14.3	3.5	7.0	9.0	5.8

3.Electrical Characteristics :

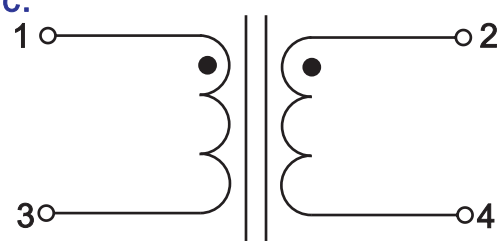
Specifications: at 25℃. Operating Temperature -40 to +125°C				
NO.	ITEM	TEST CONDITION	SPECIFICATION	REMARKS
1	Rated Voltage	Line to Line	AC250V	
2	Inductance	(1-3)(2-4) @16KHz,1.0V	6.0mH+50% -30%.	TH-2819
3	DCR	(1-3)(2-4) @25℃	220.0mΩ Max.	TH-2819
4	HI-POT	(1-3) to (2-4)	1500Vac,1mA,2SEC.	RK2670A
5	Rated curent	@70℃	1.0A .	
6	ΔL	L(1-3)-L(2-4) @16KHz, 1.0V	0.10mH Max.	TH-2819

Remark:Use manual trigger mode of instrument for test.

4.Winding Information:

WINDING SEQ.	ST-FN	WIRE/FOIL	TURNS	WRAP INSUL.	MARGIN TAPE	SLEEVE	NOTE
1	1---3	0.35mm 2UEW	35±3.0T.				
2	2---4	0.35mm 2UEW	35±3.0T.				

5.Schematic:

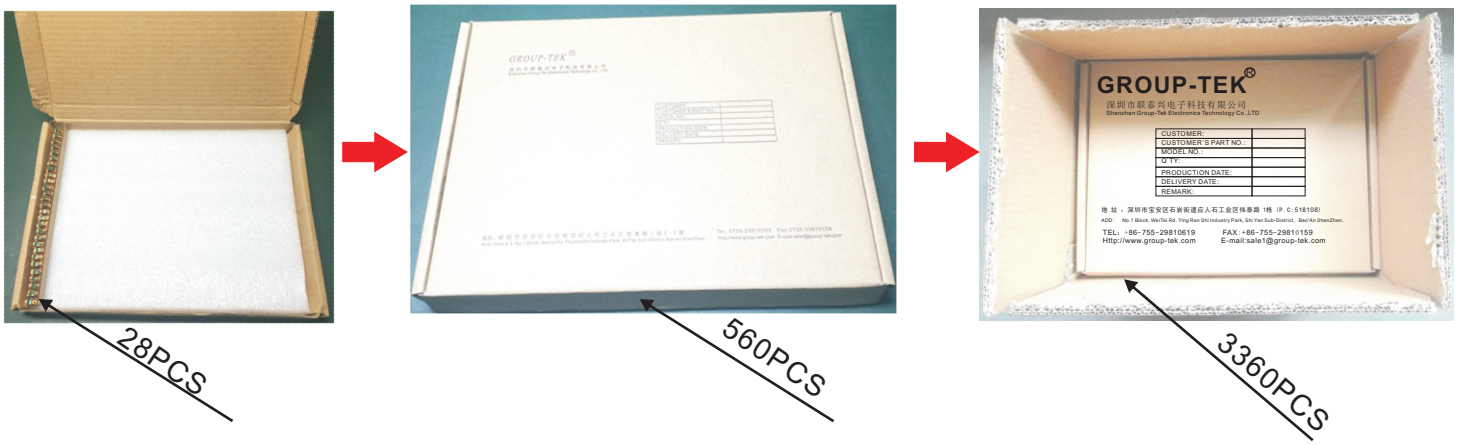


6.Material List

NO.	ITEM.	MATERIALS	SUPPLIERS/MANUFAXTURES	UL FILE NO.
1	CORE	T10*6*5 TTS-TH10	TTS TechnologyCo.,Ltd.	N/A
		T10*6*5 SSH-10	SUNSHINE ELECTRONIC TECHNOLOGY Co.,Ltd.	N/A
2	WIRE	xUEW 180	SUNTEK HOLDINGS LIMITED	OBMW2.E234867
		Polysol 180 / MW 82-C THERMAL RATING:180°C	ELEKTRISOLA HANG ZHOU CO.,LTD.	E258243
3	SOLDER	SN/CU: 99.3/0.7	Gao Xin stannum industry Co.,Ltd	N/A
4	Glue	E-500(XX)	Dong Guan city eatto electronic material Co.,Ltd	QMFZ2.E218090
5	BASE	PHENOLIC T375J	CHANG CHUN PLASTICS CO LTD.	QMFZ2.E59481

7.Packing Information:

DESCRIPTION	QTY
PIECES PER CELL	1
PIECES PER TRAY	560
PIECES PER BOX	3360
GROSS WEIGHT PER BOX(KG)	10.14(kg)
NET WEIGHT PER BOX(KG)	9.50(kg)



TOP



BOTTOM



FRONT



back

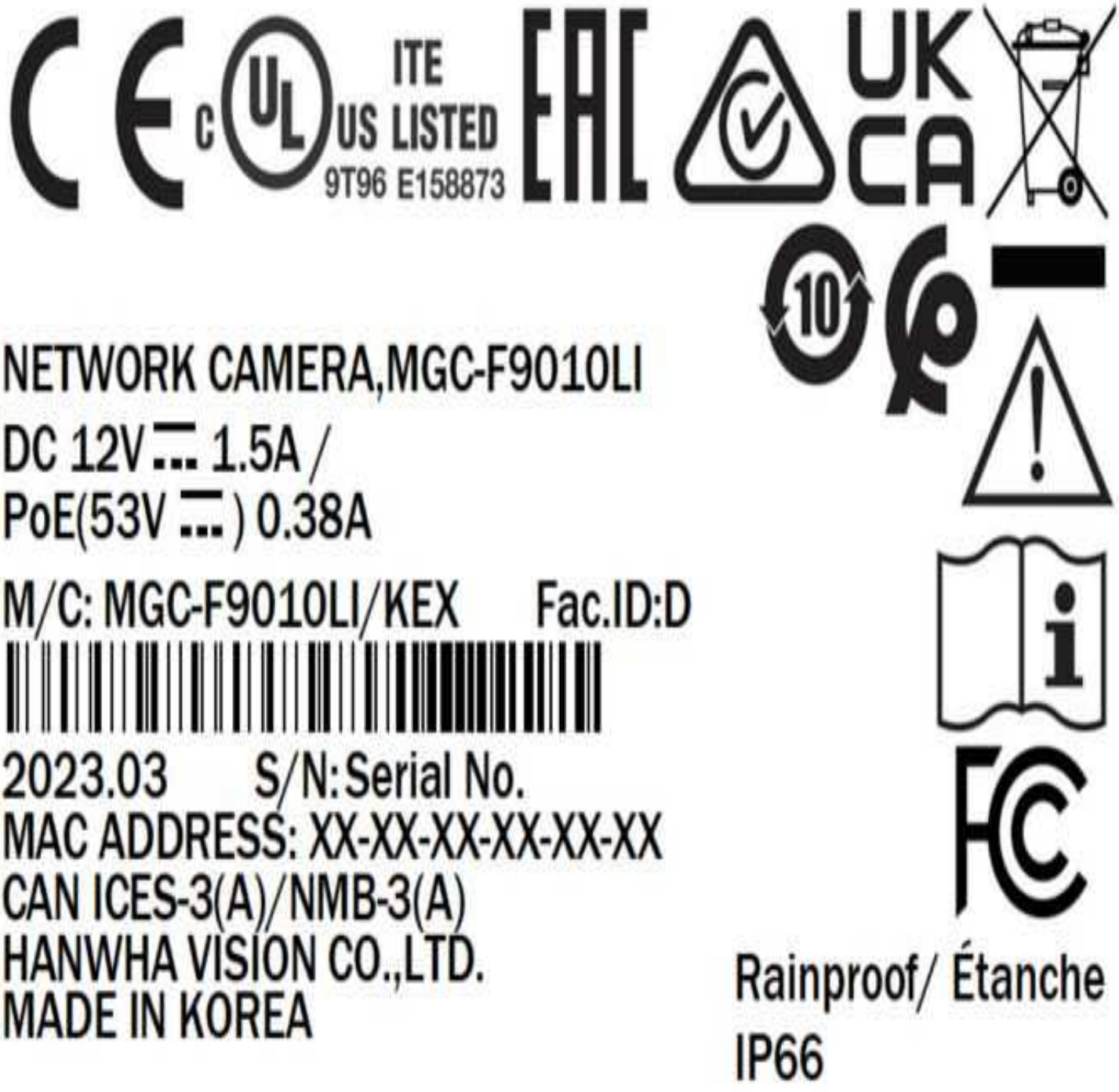


left

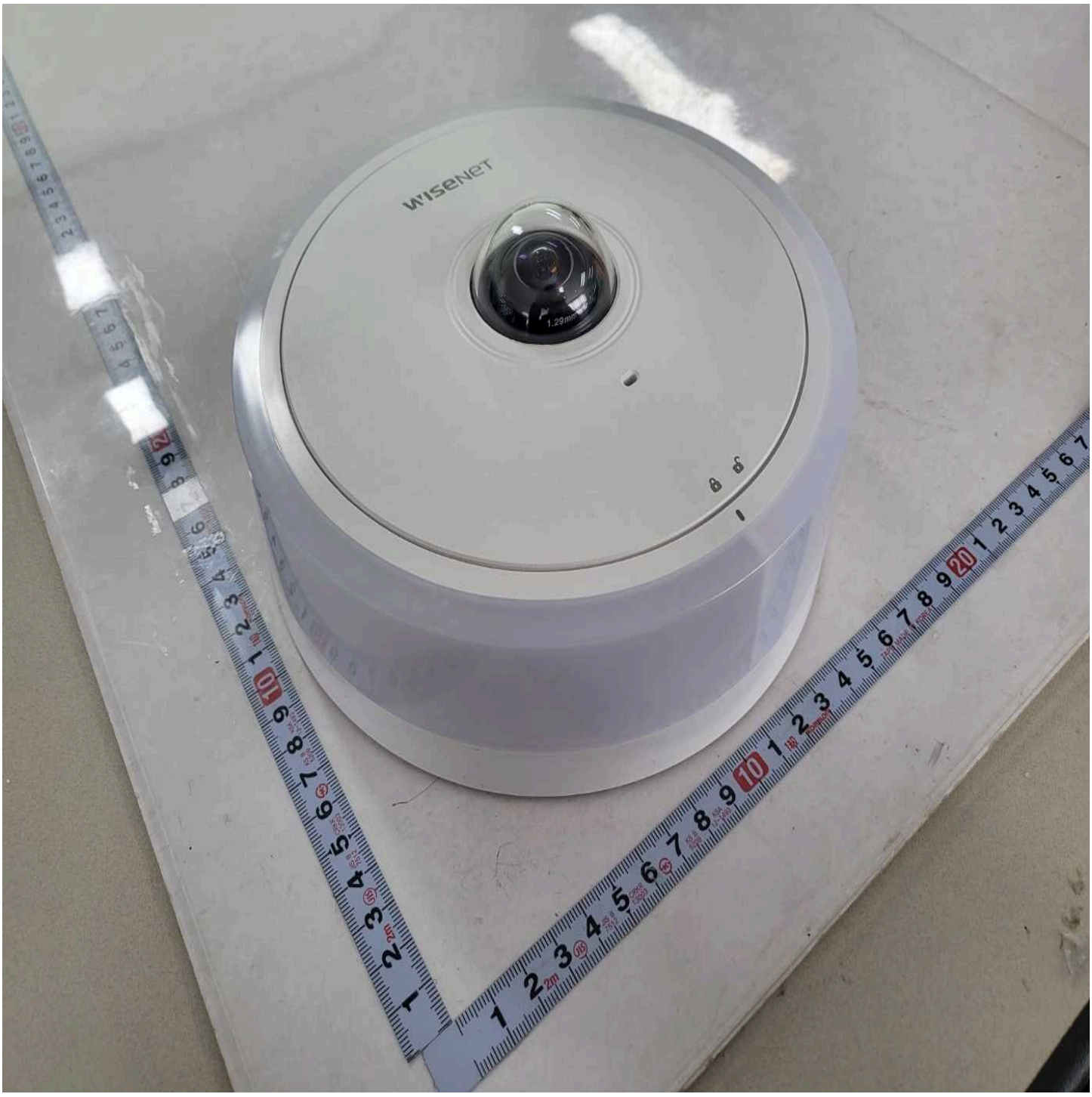


right

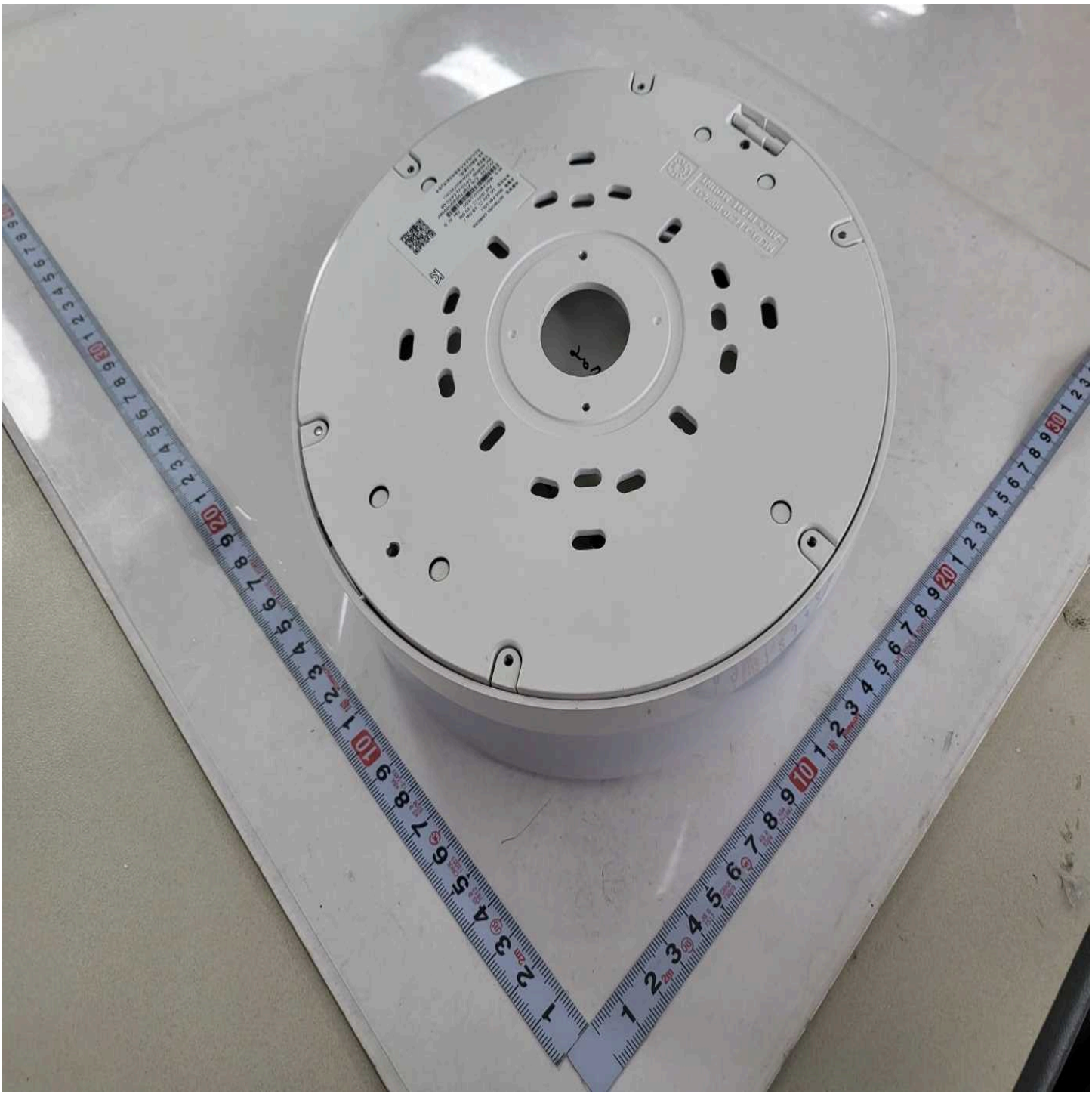



ITE
US LISTED
9T96 E158873
UK
CA
10
NETWORK CAMERA,MGC-F9010LI
DC 12V ⎓ 1.5A /
PoE(53V ⎓) 0.38A
M/C: MGC-F9010LI/KEX Fac.ID:D
2023.03 S/N:Serial No.
MAC ADDRESS: XX-XX-XX-XX-XX-XX
CAN ICES-3(A)/NMB-3(A)
HANWHA VISION CO.,LTD.
MADE IN KOREA
Rainproof/ Étanche
IP66

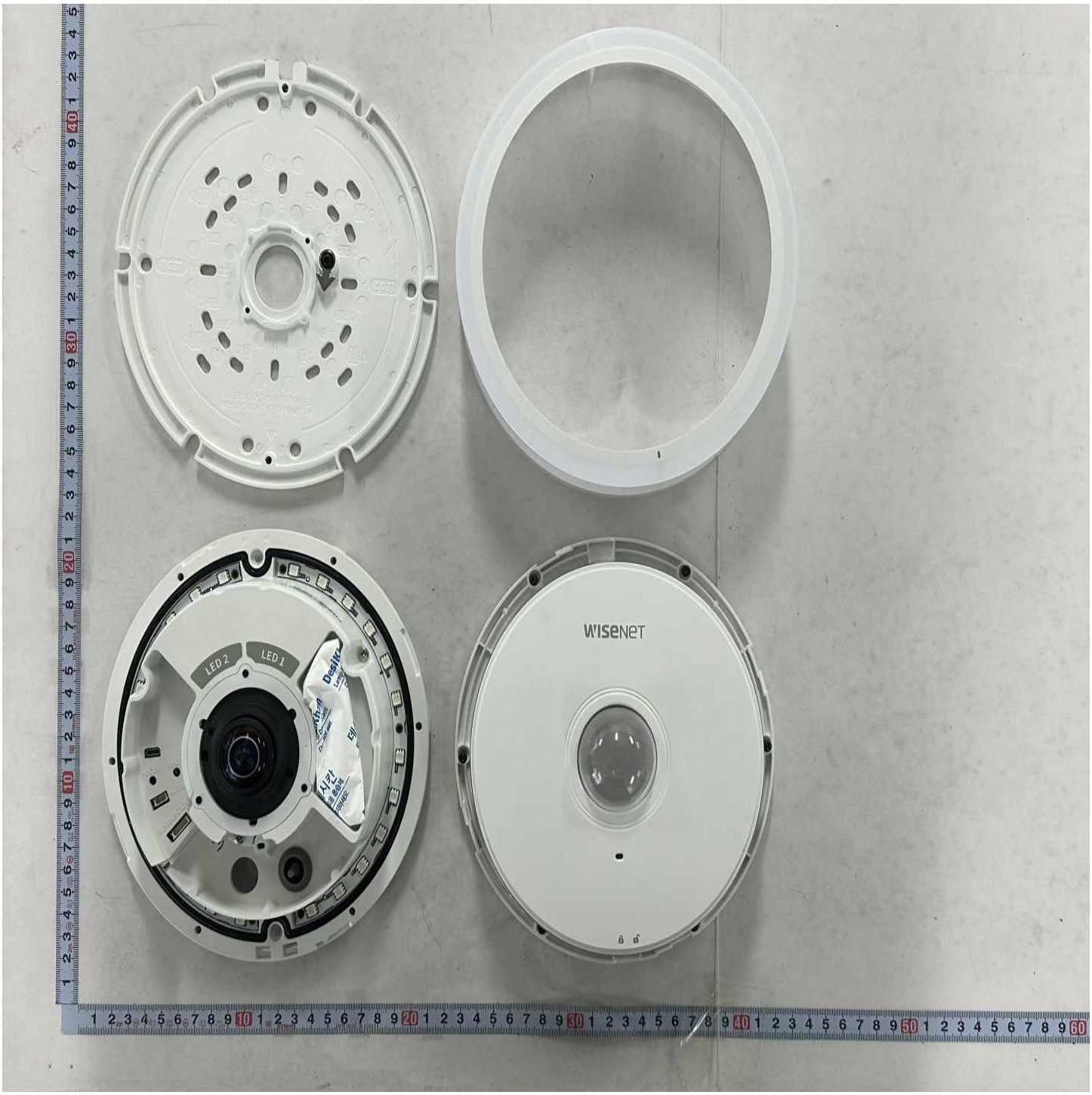
Photographs-01 Page-1



Photographs-02 Page-1



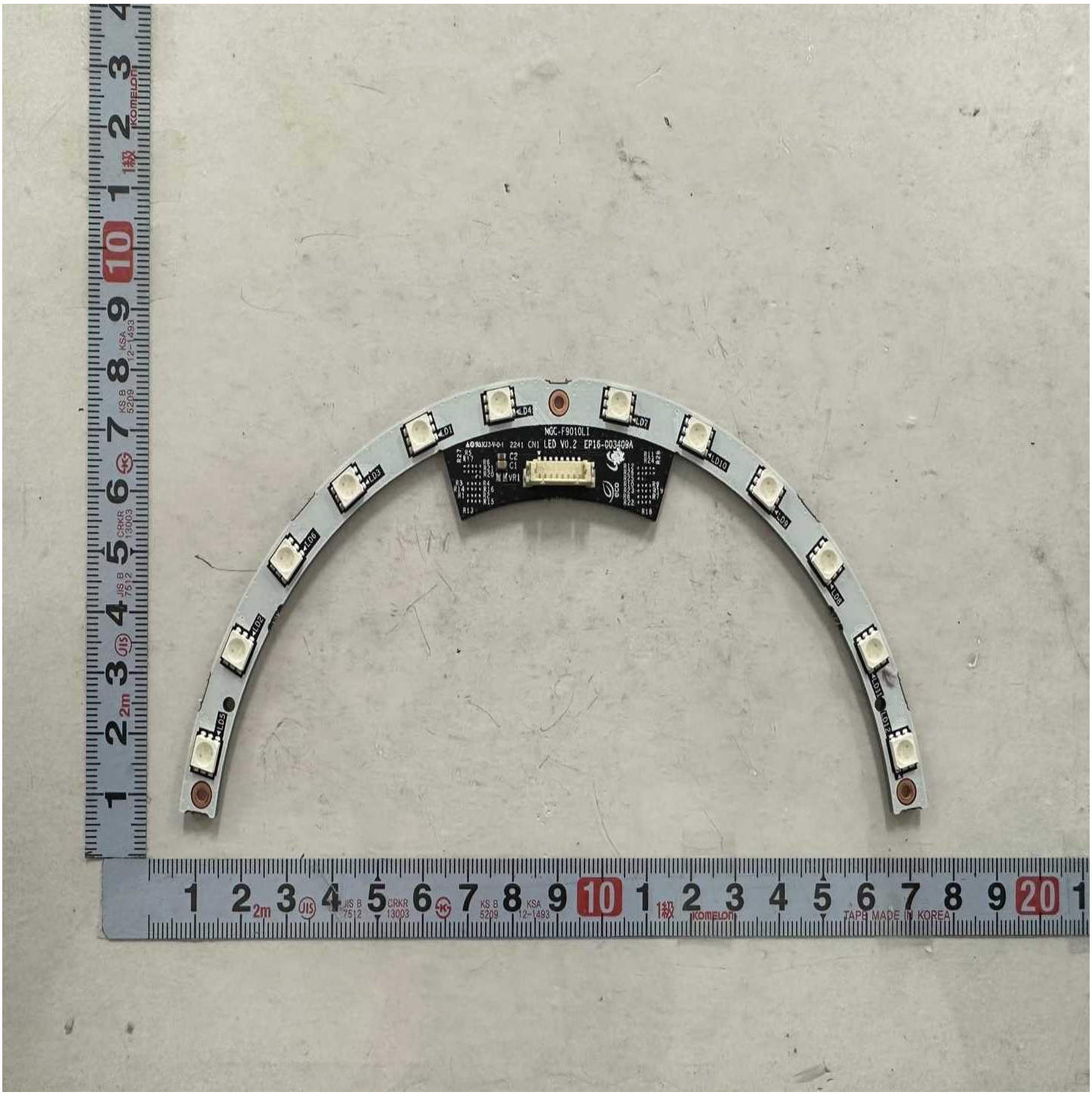
Photographs-03 Page-1



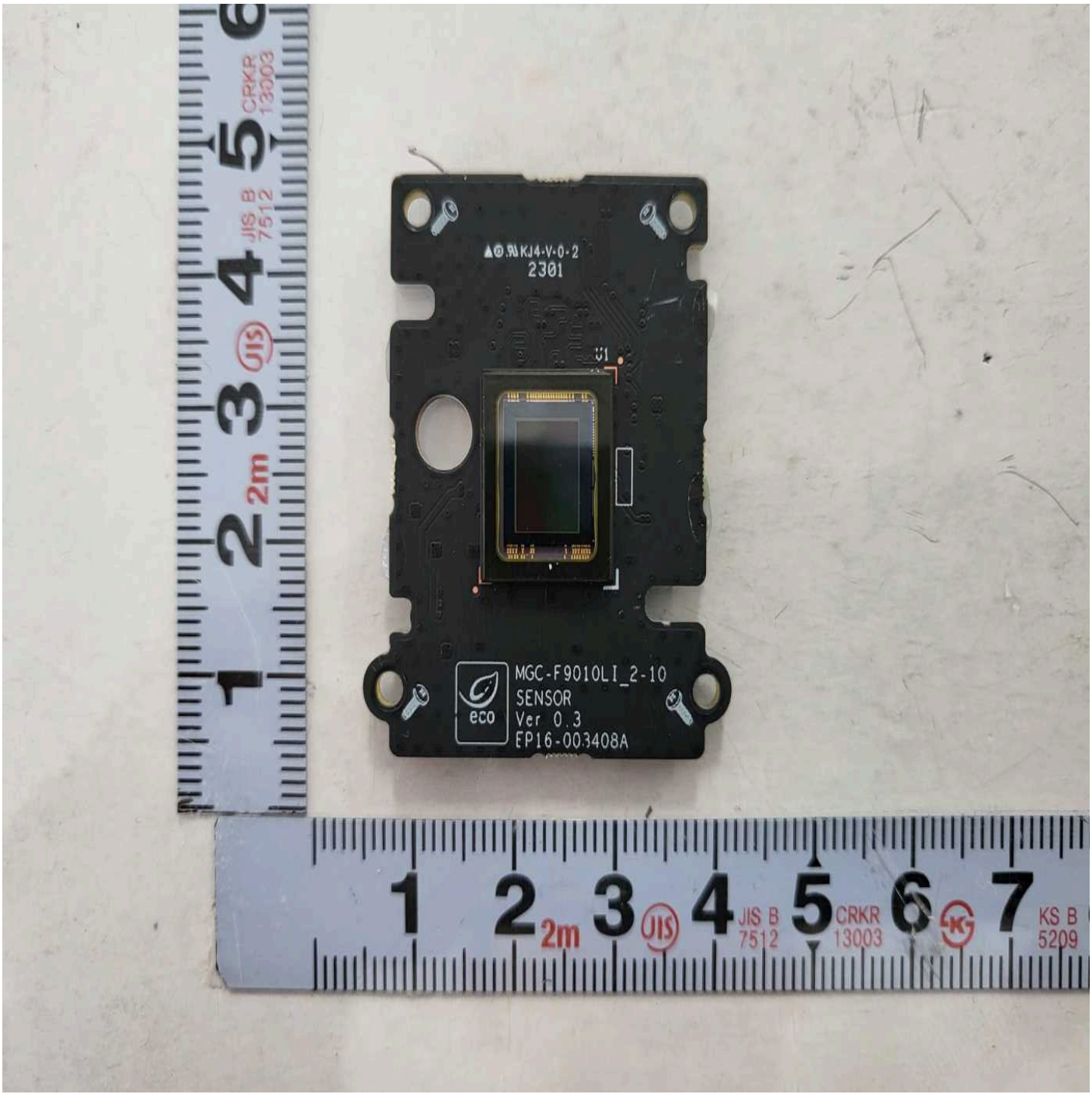
Photographs-04 Page-1



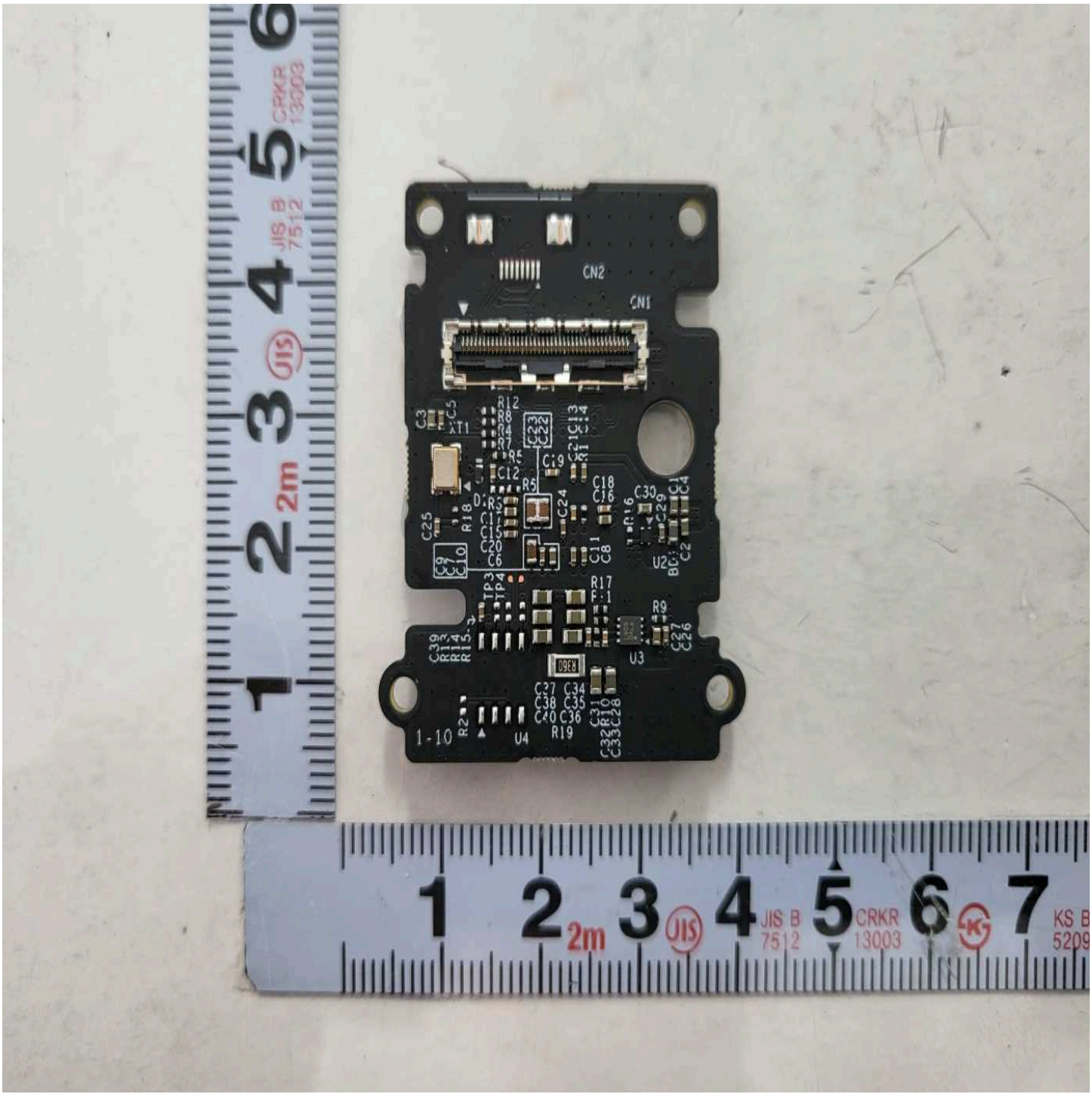
Photographs-05 Page-1



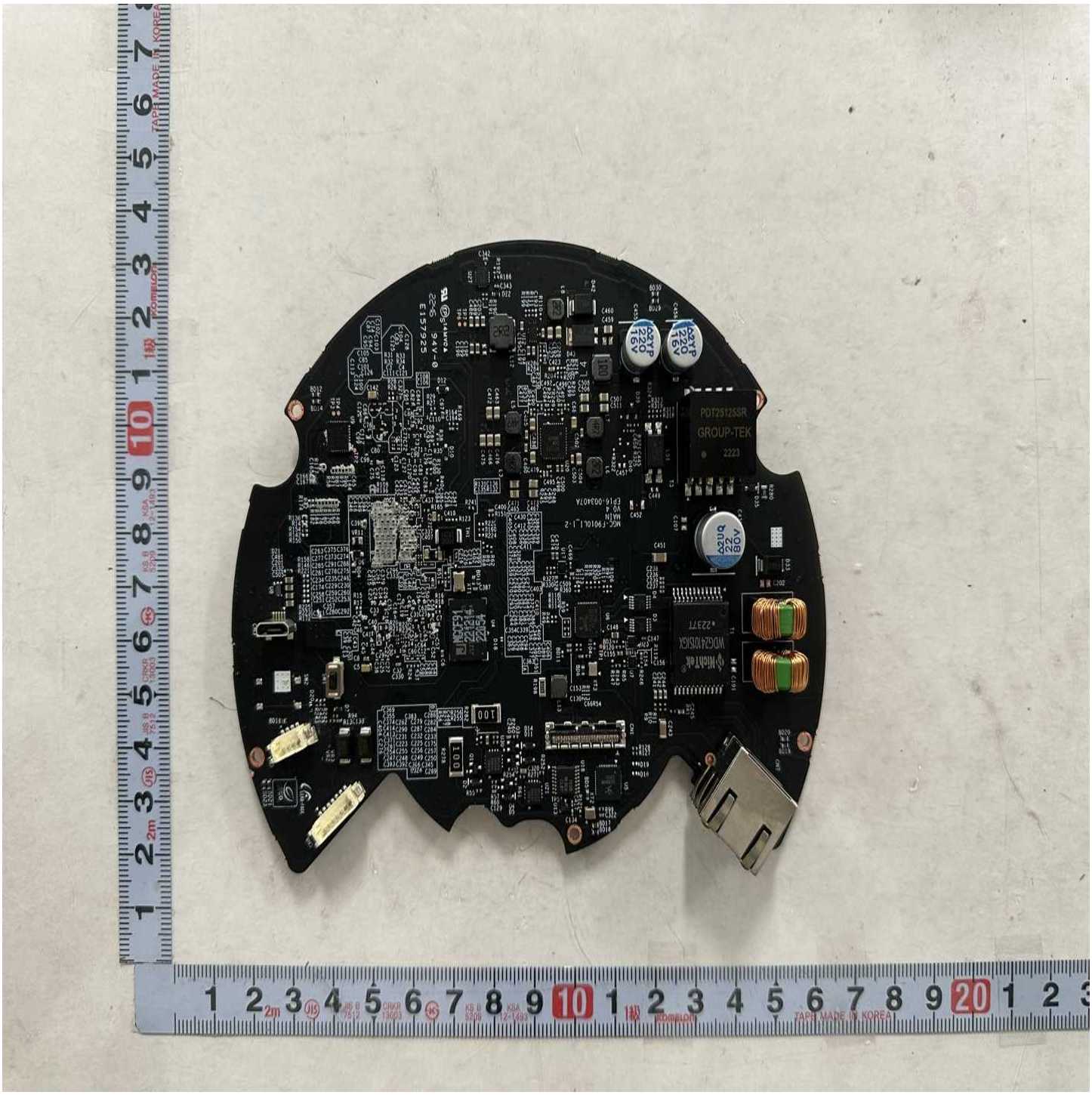
Photographs-06 Page-1



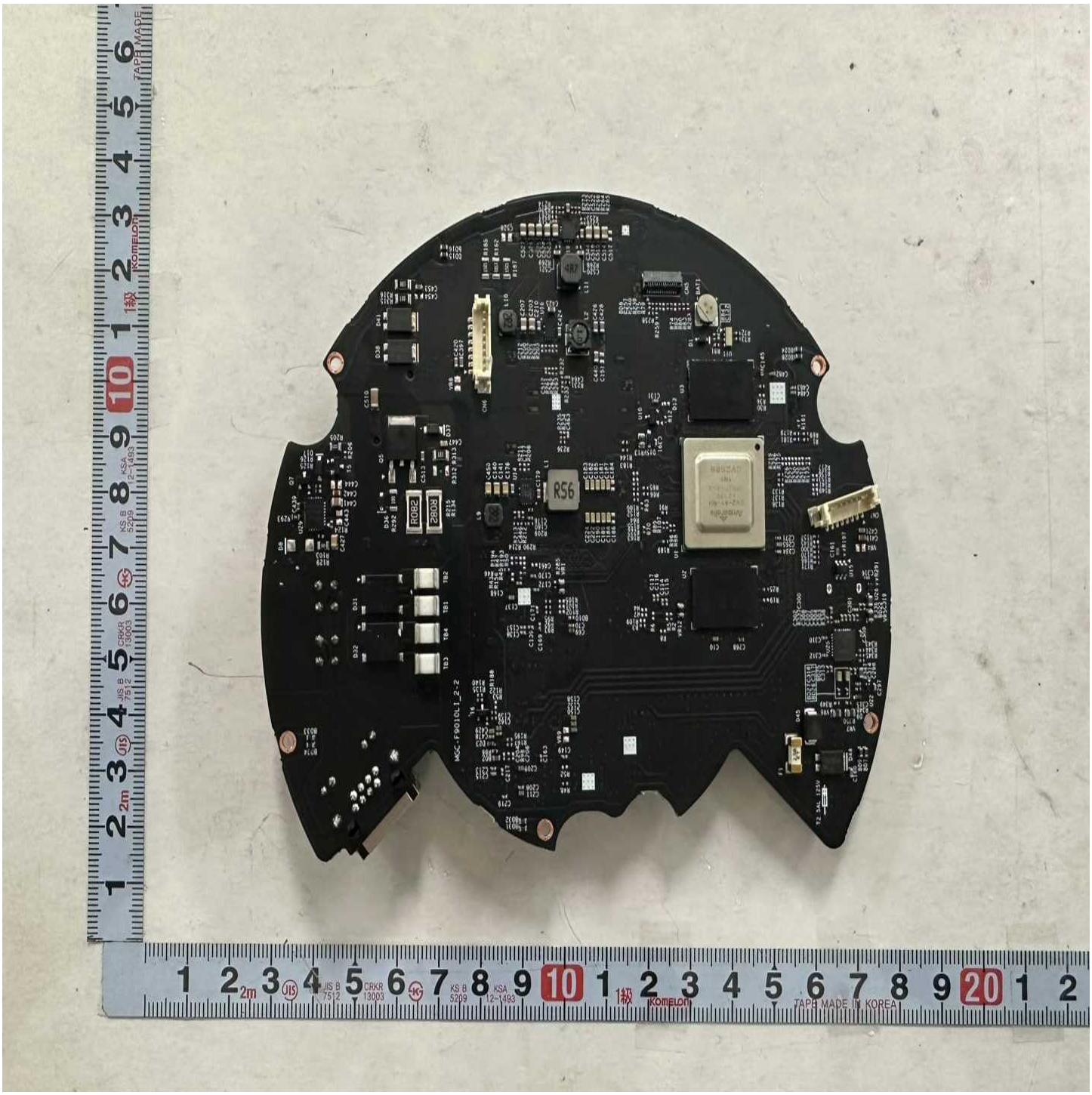
Photographs-07 Page-1



Photographs-08 Page-1



Photographs-09 Page-1



Test Record No. 1

1. Test result relate only to the items tested.
2. The manufacturer submitted representative production samples of NETWORK CAMERA, MGC-F9010LI.
3. Only the test listed were considered necessary.

The following tests were conducted:

Tests performed (name of test and test clause):	**Testing location:** CTK Co., Ltd. / 142, Dongbu-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17141, Korea (WTDP)
4.4.3.2, T.5 – STEADY FORCE TEST, 250 N	
4.4.3.4, T.6 - IMPACT TEST	
4.4.3.8, T.8 – STRESS RELIEF TEST	
5.4.1.8 – DETERMINATION OF WORKING VOLTAGE	
8.7 – WALL, CEILING, OR OTHER STRUCTURE MOUNTING TESTS	
B.2.5 – INPUT TEST: SINGLE PHASE	
B.2.6, 5.4.1.4, 6.3, 9.3, B.1.5 – NORMAL OPERATING CONDITIONS TEMPERATURE MEASUREMENT	
B.3 – SIMULATED ABNORMAL OPERATING CONDITIONS	
B.4 – SIMULATED SINGLE FAULT CONDITIONS	
M.3.2 – PROTECTION CIRCUITS FOR BATTERIES	
Q.1 – LIMITED POWER SOURCE	
Y.5.3 - WATER SPRAY TEST	
Y.6.2 - POLYMERIC OUTDOOR ENCLOSURE IMPACT	
The following tests were waived:	**Rationale for Waiving**
Y.4.3 – TENSILE STRENGTH AND ELONGATION	Gasket Test was conducted under E158873-A6034 (PART 22, 8.5, ANNEX D.2 – TENSILE STRENGTH AND ELONGATION)
Y.4.4 - COMPRESSION TEST - GASKETS, CLOSED CELL CONSTRUCTION	Gasket Test was conducted under E158873-A6034 (PART 22, 8.5.1, ANNEX D.3 – COMPRESSION TEST – GASKETS, CLOSED CELL CONSTRUCTION)

Test results are valid only for the tested equipment. These tests are considered representative of the products covered by this Test Report. The test methods and results of the above tests have been reviewed and found to be in accordance with the requirements in the Standard(s) referenced at the beginning of this Test Report.

The following supplements are provided as part of this Test Record. NOTE: These supplements are only available to the Applicant via the myUL™ Client Portal.

Type	Supplement Id	Description
Datasheet	02-01	Datasheet
Attachment	02-02	Dual language safety labeling CRD
Attachment	02-03	Dual Language Letter of Assurance (C-UL)