Thank you for giving UL the opportunity to partner with you.
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 on Project

For your convenience, the below describes the related updates:

E158873-A6266-DescriptionUL
Figure-13-Total

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Times change, Trust Remains™

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:	CLOUD GATEWAY RECORDER
Model:	CGR-1610
Rating:	100-240 Vac, 50/60 Hz, 0.65 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: SeungTae Kim / 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

CLOUD GATEWAY RECORDER consists of R/C (QQJQ2/8) power supply, DC Fan, main board, maximum 2 hard disk-drives (optional) and numerous components mounted on PWB.

Model Differences

N/A

Test Item Particulars

Product group .....:	end product
Classification of use by .....:	Ordinary person
Supply Connection .....:	AC Mains
Supply tolerance .....:	+10%/-10%
Supply connection – type .....:	pluggable equipment type A - appliance coupler
Considered current rating of protective device ....:	20 A; Location: building
Equipment mobility .....:	movable stationary
Over voltage category (OVC) .....:	OVC II
Class of equipment .....:	Class I
Special installation location .....:	N/A
Pollution degree (PD) .....:	PD 2
Manufacturer's specified Tma (°C) .....:	40
IP protection class .....:	IPX0
Power systems .....:	TN
Altitude during operation (m) .....:	2000 m or less
Altitude of test laboratory (m) .....:	2000 m or less
Mass of equipment (kg) .....:	Max. 4.11 kg (with HDD 2 EA)

Technical Considerations

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of : 40 °C
- The product is intended for use on the following power systems : TN

- Considered current rating of protective device as part of the building installation (A) : 20
- Mains supply tolerance (%) or absolute mains supply : +10%/-10%
- The equipment disconnect device is considered to be : Appliance inlet
- The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual

Additional Information

4791831615
- All tests were considered necessary for UL/CSA national deviation based upon previous evaluation under CB Scheme (CLOUD GATEWAY RECORDER; sample model CGR-1610). The CB Scheme Test Certificate, Ref. Certi. No. DK-169336-UL; 2025-07-29 and Report Ref. No. C25IA019-M0A0; 2025-07-22 were prepared by UL Solutions Demko A/S, Borupvang 5A, DK-2750 Ballerup, Denmark.

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 or File Number
Equipment identification marking – model identification	Model Number
Equipment rating marking – ratings	"Input Ratings (voltage, frequency, current)"
Class I equipment -Terminal for main protective earthing	Provided adjacent to the main protective earthing terminal  (IEC 60417-5019)
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.~~)
SCC requirement	If the signal words DANGER, WARNING, and CAUTION are included, a French manual is provided.

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:**					
	N/A					
BD1.3	**Electric Strength Test Exemptions – This test is not required for the following models:**					
	N/A					
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.**					
	N/A					

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
Power Supply	Delta Electronics, Inc.	DPS-200AB-225 XX (X=0-9, A-Z or blank)	Rated Input: 100-240 V~, 50-60 Hz, 3.5 A; Output: +12Vdc, 5A; +52Vdc, 2.7A; or +54Vdc, 2.7A; Max. output power 200W	QQGQ2/8	UL (E131881)	
Power cord set	LONGWELL	LP-30B + SVT 18AWG 3C+ LS-13	Detachable, Min. 1.5 m, Max. 2.4 m long, rated 125 V, 10 A, 18/3 AWG, 60 deg. C, SVT type flexible cord. One end with NEMA 5-15P the other end with appliance coupler.	ELBZ	UL (E55349)	
Power cord set - Alternate	Interchangeable	Interchangeable	Detachable, Min. 1.5 m, Max. 2.4 m long, rated 125 V, 10 A, 18/3 AWG, 60 deg. C, SVT type flexible cord. One end with NEMA 5-15P the other end with appliance coupler.	ELBZ	UL	
Enclosure -Top (Metal) (Fire / Mech / Elec)	Interchangeable	Interchangeable	Steel, Min. 0.6 mm thickness, see enclosure for more dimension.	-	Tested in equipment	
Enclosure - Bottom (Metal) (Fire / Mech)	Interchangeable	Interchangeable	Steel, Min. 0.8 mm thickness, see enclosure for more dimension.	-	Tested in equipment	
Enclosure - Rear (Metal) (Fire / Mech / Elec)	Interchangeable	Interchangeable	Steel, Min. 0.8 mm thickness, see enclosure for more dimension.	-	Tested in equipment	

Enclosure- Front Cover (Plastic) (Fire / Mech)	LOTTE CHEMICAL CORPORATION	HN-1068(+)(f1)	Min. 1.5 mm thickness, rated Min. V-0, 130 deg. C	QMFZ2	UL (E115797)	
Heatsink (Upper U501)	Interchangeable	Interchangeable	Aluminium, Approx. Overall size of 40 by 40 by 17.5 mm, Min. 0.5 mm thickness, see enclosure for more dimension.	-	Tested in equipment	
DC Fan (Nearby Main board and Side) (Total 2ea)	SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO., LTD	HA40101V4-1(Y) (Type: HA40101V4-1000U-A99)	12 Vdc, 0.37 A	GPWV2	UL (E77551)	
Hard Disk Driver (HDD) (Max. 2ea)	Interchangeable	Interchangeable	Max. 12 Vdc	AZOT2	UL (E319334)	
Lithium Battery (J2E1)	WUHAN LIXING (TORCH) POWER SOURCE CO LTD	CR2032	Lithium/manganese dioxide (Coin), Max Abnormal Charging Current: 10 mA, Max Abnormal Charging Voltage: 5 Vdc	BBCV2	UL (MH26236)	
Reverse Current Protection Circuit for Lithium Coin Battery (J2E1)	Interchangeable	Interchangeable	Diode (D20, Max reverse voltage 40 V, Max reverse current 5 uA) and resistor (R1, R6, 1.0 kohm) in series.	-	Tested in equipment	
USB Protection IC (USB 2.0: U8, U18) (USB 3.0: U20, U73)	DIODES INC	AP2182A (Type: AP2182ASG-13)	Rated 2.7–5.5 Vdc, 1.5 A	QVGS2	UL (E322375)	
PWB	HANNSTAR BOARD CORP	MV-4	Min. V-0, 130 deg. C	ZPMV2	UL (E89382)	
PWB - Alternate	EXPRESS ELECTRONICS LTD	14MV0	Min. V-0, 130 deg. C	ZPMV2	UL (E157925)	

PWB - Alternate	KI JOO INDUSTRIAL CO LTD	KJ3-V-0-1	Min. V-0, 130 deg. C	ZPMV2	UL (E111636)	
PWB - Alternate	Interchangeable	Interchangeable	Min. V-0, 130 deg. C	ZPMV2	UL	
Label	Interchangeable	Interchangeable	Suitable for use on each type of surface to which applied, rated for maximum and minimum surface temperature specified, or Min. 40 deg. C if not specified.	PGDQ2 or PGJI2	UL	

Enclosures

Type	Supplement Id	Description
Photographs	03-01	External View - 1
Photographs	03-02	External View - 2
Photographs	03-03	Front View
Photographs	03-04	Rear View
Photographs	03-05	Internal View
Photographs	03-06	SMPS
Photographs	03-07	Main Board - Front
Photographs	03-08	Main Board - Rear
Photographs	03-09	DC Fan (Nearby Main Board and Side)
Manuals	06-01	Manual
Miscellaneous	07-01	Label
Miscellaneous	07-02	Enclosure Drawing
Miscellaneous	07-03	Heatsink Drawing

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

Read these operating instructions carefully before using the unit.

Follow all the safety instructions listed below.

Keep these operating instructions handy for future reference.

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 lightning 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) Cloud Gateway Recorder is professional equipment and for use in locations where it is unlikely that children will be present.

Standards Approvals

- Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
  This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

- RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
- Do not ingest battery, Chemical Burn Hazard.
- This product contains a coin / button cell battery. If the coin / button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children.
  If you think batteries might have been swallowed or placed inside any part or the body, seek immediate medical attention.
- Connect the power cord into a grounded outlet.
- The Mains plug is used as a disconnect device and shall stay readily operable at any time.
- When the HDD reaches its end of life, the stored video data may be damaged, and not be able to be recovered.
- The HDD status LED on the front of the system continuously blinks to indicate that the system's connection to the HDD is normal. Check the HDD status LED regularly to see if it blinks continuously. Recording may not be possible when there is an HDD failure.
  Periodically check the recording status and backup important data regularly.

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.
- Ne pas ingérer la pile, risque de brûlure chimique.
- Ce produit contient une pile de type bouton/pièce de monnaie. Si la pile de type bouton/pièce de monnaie est avalée, elle peut causer de graves brûlures internes en seulement 2 heures et peut entraîner la mort.
- Gardez les piles neuves et usagées hors de portée des enfants. Si le compartiment de la pile ne se ferme pas correctement, cessez d'utiliser le produit et gardez-le d'atteinte des enfants.
  Si vous suspectez que des piles ont été avalées ou insérées dans une partie du corps, consultez un médecin sans tarder.

Before Start

This manual provides information necessary to use the product, including a brief introduction, names of each part, functions, the connection method, and menu settings. Please read this manual carefully before using the product for proper use.

- This manual explains how to use the product based on the default values and the default screens.
- The information in this manual may vary, depending on the product's software update and our policies, and is subject to change without notice to the user.
- Please note that we are not responsible for damage caused by using non-standard products or any other besides those mentioned in the product specification manual.
- If you need to open the case and repair the inside, please contact the place of purchase and get professional help.
- Before adding a hard disk drive or external storage (USB memory, USB HDD, etc), check if it is compliant with this product. For the compatibility list, contact the retailer.

About Target Readers

This manual contains information for the user using Cloud Gateway Recorder.

About Product Usage

Users of this product can perform the following operations:

- Monitoring cameras registered in Cloud Gateway Recorder in real time

Before using this product, please make sure that the product is the latest software version. You can visit Hanwha Vision's product homepage (https://www.HanwhaVision.com) to check and download the latest software version.

Warning

Battery

There is a risk of explosion if the battery inside the product is incorrectly replaced, so be sure to use the same battery used in the product.

The specifications of the battery in use are as follows.

- Voltage: 3V
- Capacity: 220 mAh
- Continuous standard load: Max. 0.4mA
- Usable temperature: -30°C ~ +60°C (-22°F ~ +140°F)

■ Do not place the battery under direct sunlight or near a heat source, such as a heater.
(eg. leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas;)

System Shutdown

Turning off the power while the product is in operation, or undertaking improper actions may cause damage or malfunction to the hard drive or the product.

You may want to install a UPS system for safe operation in order to prevent damage caused by an unexpected power stoppage. (Any questions concerning UPS, consult your UPS retailer.)

■ If powered off abnormally, restarting may take more time for restoring data from hard disk drive for proper operation.

Operating temperature

The operating temperature of this product is from 0°C to 40°C.
If left in an environment with a temperature below the range of operating temperature, the product may not operate. If this occurs, try using the product after storing it at room temperature.

Especially for the built-in HDD in the product, its guaranteed temperature range is 5°C ~ 55°C (41°F ~ 131°F). Likewise, the hard drive may not work at a temperature below the guaranteed one.

About Security

The initial administrator ID is "admin," and you need to set the password when logging in for the first time. Please change your password periodically every three months to safely protect personal information and to prevent damage through information theft. Please note that the user is responsible for their security and any other problems caused by mismanaging a password.

Mainboard replacement maintenance

If there is no 'Config' backup when replacing the motherboard, the recorded video for each channel may be connected differently from the existing video.

Features

This product can monitor video and audio from a network camera and record them to a hard disk by connecting the camera(s) to Hanwha Vision's OnCloud service.
The PC provides an environment where this product can be set up.

Package Contents

Please unwrap the product, and place the product on a flat place or in the place to be installed.
Please check the following contents are included in addition to the main unit.

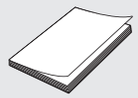
- The appearance of the components may differ from the image shown.
- Accessory category and quantity may differ depending on sales region.
- For some regions, HDD is not pre-installed. HDD Fixing Screw, SATA Power Cable, SATA data cable and SATA power/data cable quantity vary depending on the model.



Cloud Gateway Recorder
CGR-3210B1



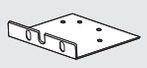
Cloud Gateway Recorder
CGR-1610



Quick Guide



Power Cable



Bracket Rack ❶



Bracket Rack ❷



SATA Power Cable ❶



SATA Power Cable ❷



SATA Data Cable



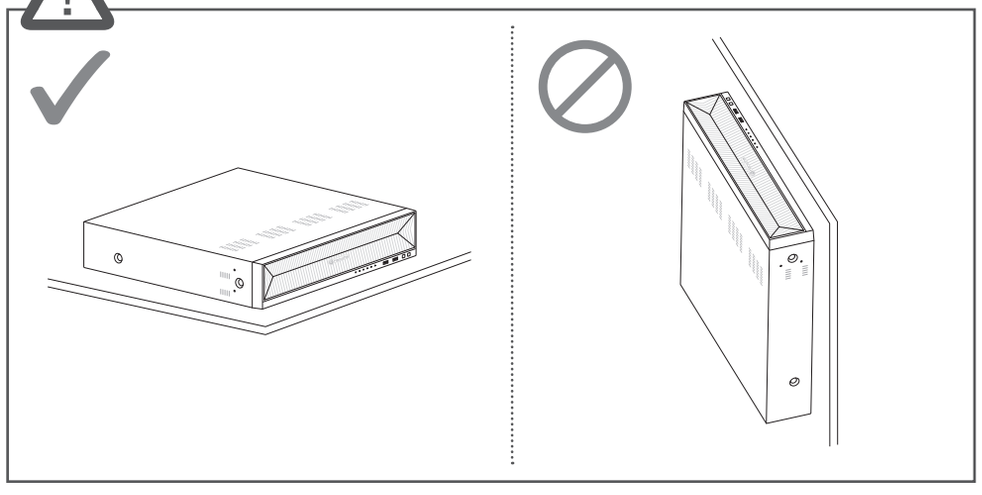
HDD Fixing Screw



Bracket Fixing Screw

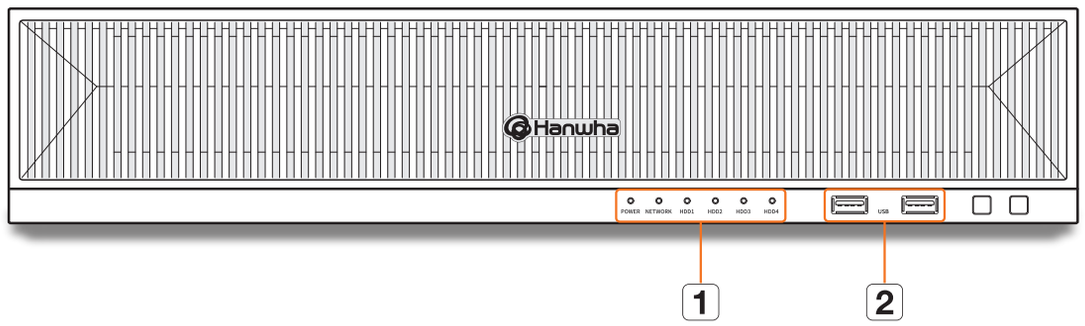
Parts \ Model name	CGR-3210B1	CGR-1610
Cloud Gateway Recorder	✓	✓
Quick Guide	✓	✓
Power Cable	✓	✓
Bracket Rack ❶	✓ (2 ea)	
Bracket Rack ❷		✓ (2 ea)
SATA Power Cable ❶	✓	
SATA Power Cable ❷		✓
SATA Data Cable	✓ (4 ea)	✓ (2 ea)
HDD Fixing Screw	✓ (16 ea)	✓ (8 ea)
Bracket Fixing Screw	✓ (4 ea)	✓ (4 ea)

- When using the product, lay it down as shown in the picture.

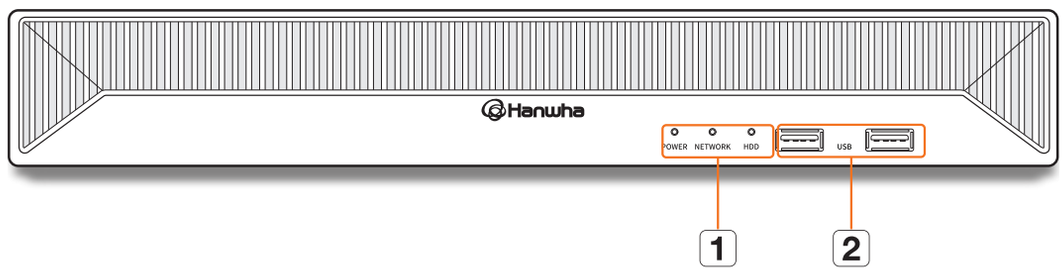


Names and Functions of the Product (Front)

CGR-3210B1



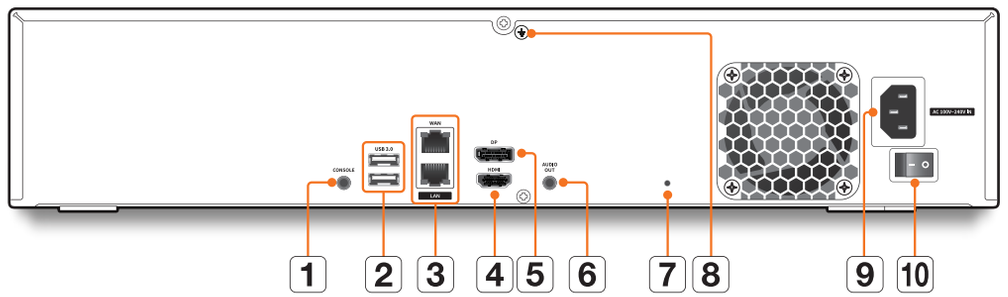
CGR-1610



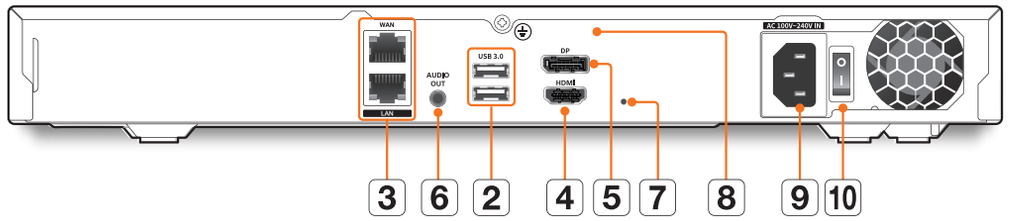
Name		Functions
1	LED Indicator	**POWER** : Shows the power ON/OFF status.
		NETWORK : Displays the connection and data transmission status of the WAN port.
		HDD: Displays the operating status of the HDD. The LED blinks when the HDD is operating.
2	USB	Port for maintenance purposes. (USB 2.0 supported)

Names and Functions of the Product (Rear)

CGR-3210B1



CGR-1610



Name		Functions
1	CONSOLE	Port used for service repair purposes.
2	USB 3.0	Port for maintenance purposes. (USB 3.0 supported)
3	WAN	Network interface used for external network (Cloud) connection. (Default DHCP)
	LAN	Network interface used to connect the camera. (Default Static IP: 192.168.1.200)
4	HDMI	Port used for service repair purposes. You can check the product's IP address when connecting.
5	DP	Port used for service repair purposes. You can check the product's IP address when connecting.
6	AUDIO OUT	This port is unused.
7	Factory Reset	You can reset all product settings to their factory defaults. Executing "Factory Reset" will delete all HDD recording data.
8	Ground Connection	Port for connecting a separate ground cable. For safe handling of the device, please add a ground wire.
9	Power input port	Port to connect power to.
10	Power Switch	Power on/off switch.

- When connecting the AC power cord or turning on the power switch, there may be a luminous (light) phenomenon inside the SMPS. This phenomenon is the normal operation of the SMPS protection element.

Installation

Please take note of the followings before using this product.

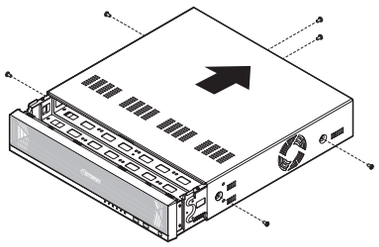
- Do not use the product outdoor.
- Do not spill water or liquid in the connection part of the product.
- Do not impose the system to excessive shock or force.
- Do not pull out the power plug forcefully.
- Do not disassemble the product on your own.
- Do not exceed the rated input/output range.
- Use a certified power cord only.
- For the product with an input ground, use a grounded power plug.

Mounting the HDD

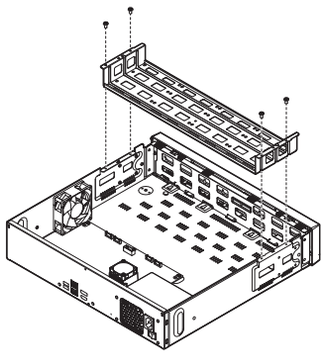
- If you are adding a new or previously used HDD to this product in addition to the HDD(s) originally installed, format the new HDD manually in the product before use.
- For replacement or installation of an additional HDD, you must contact your dealer or our customer center.

CGR-3210B1

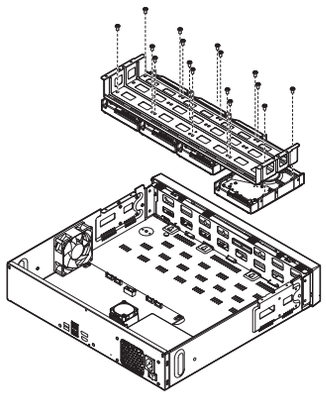
1 Remove the screws from the left/right sides and back side, and push the cover back to release it.



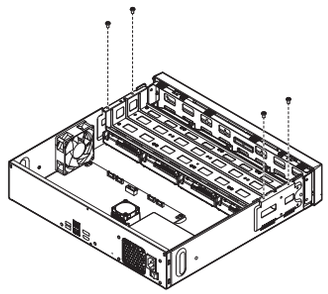
2 Remove the screws from the left/right sides and release the bracket.



3 Mount the 4 hard disks into the bracket, and secure them with screws.

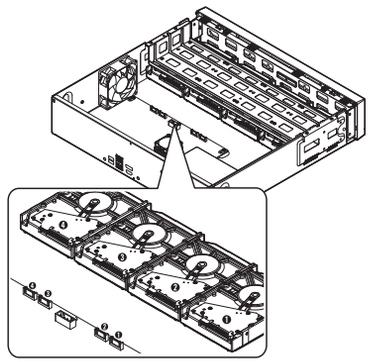


4 Fix the HDD-mounted bracket to the recorder using screws.



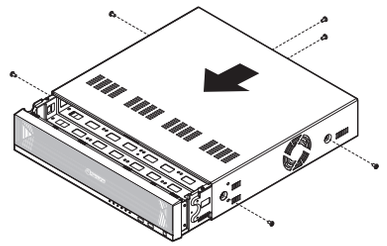
5 Connect the SATA/power cable of the HDD to the connector of the main board.

- Refer to the figure below for the HDD location number and connector number.

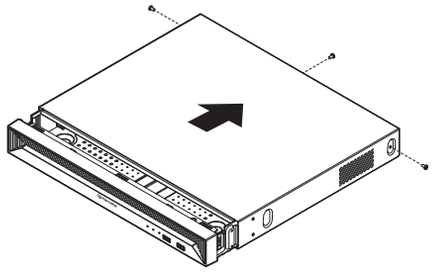


6 Make sure that there is no problem in the connection port and routing inside the recorder, and then fix it using screws after closing the cover.

- When closing the cover, be careful not to damage the cable.

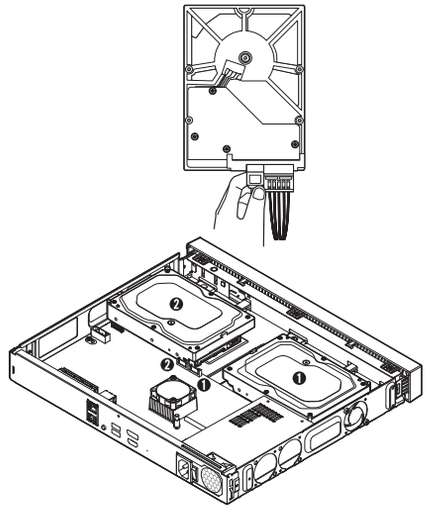


1 Remove the screws from the left/right sides and back side, and push the cover back to release it.



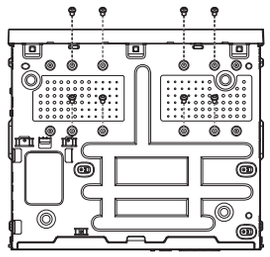
2 Connect the SATA/power cable of the HDD to the connector of the main board.

- Refer to the figure below for the HDD location number and connector number.



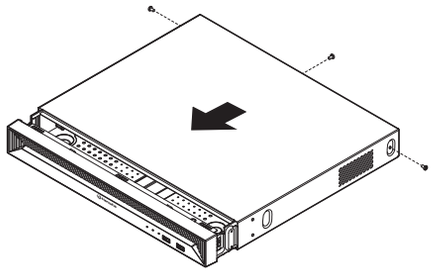
- Gently press the connector before removing the HDD. Do not force to pull the cable.

3 Use the screws to fix the HDD to the bottom of the recorder.



4 Make sure that there is no problem in the connection port and routing inside the recorder, and then fix it using screws after closing the cover.

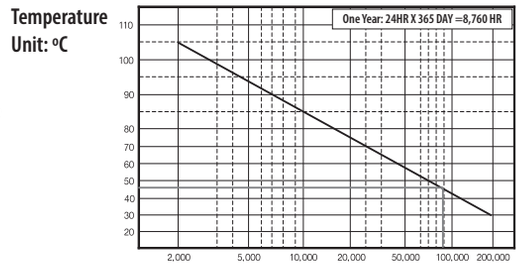
- When closing the cover, be careful not to damage the cable.



Checking the installation environment

This product is a top-notch security device that is equipped with a high-capacity HDD and other key circuit boards.

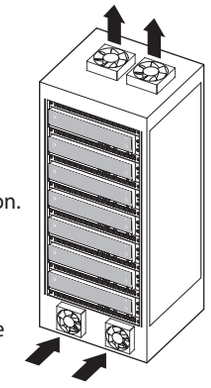
Note that an excessive internal temperature of the product may cause a system failure or a shortened product life (see the right figure). Keep in mind the following instructions before installing the product.



[Figure 1]

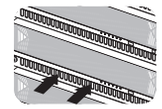
When mounting the product on a rack, comply with the following instructions.

1. Please ensure that the rack inside is not sealed.
2. Please ensure the air is circulated through the inlet/outlet as shown in the picture.
3. If you pile up the prudcts or other rack-mount devices as shown in figure 2, secure room for ventilation or install a vent.
4. For natural air convection, place the inlet at the bottom of the rack and the outlet on top.
5. It is strongly recommended that a fan motor is installed at the inlet and the outlet for air circulation. (Please fit a filter at the inlet to screen dust or foreign substances.)
6. It is recommended to keep the temperature inside the rack or around the product at 25°C.



Rack Mount Instructions - The following or similar rack-mount instructions are included with the installation instructions :

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.



[Figure 2]

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

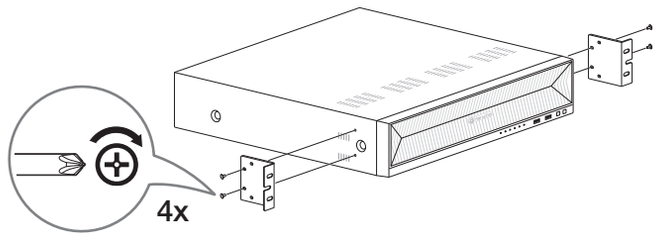
D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

Installing the Rack

As shown in the figure, Install the Bracket-Racks on both sides of the product using the bracket mounting screws.

- Fix the T screw not to be loosened by vibrations.



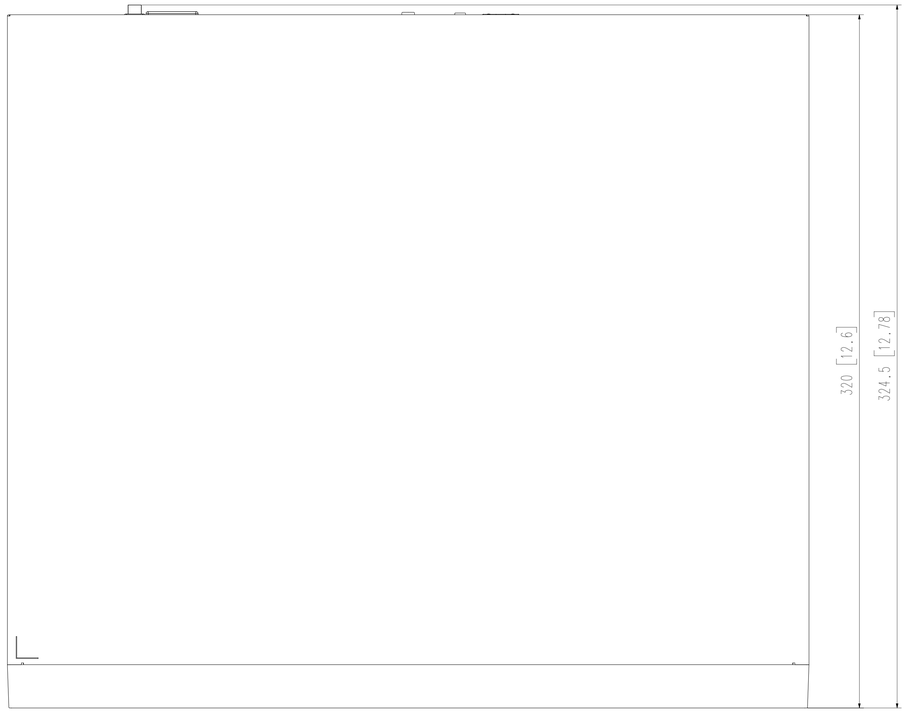
e.g. CGR-3210B1

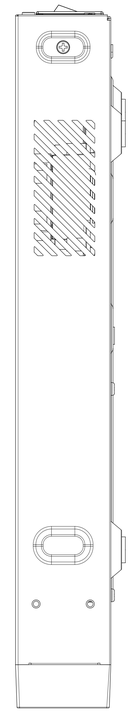

Cloud Gateway Recorder
MODEL: CGR-1610
AC 100-240V~ 50/60Hz 0.65A
M/C: CGR-1610/KUS
Fac. ID: D
DATE
S/N: Serial No.
MAC ADDRESS 1: XX-XX-XX-XX-XX-01
MAC ADDRESS 2: XX-XX-XX-XX-XX-02
CAN ICES-3(A)/NMB-3(A)
MADE IN KOREA
Hanwha Vision Co., Ltd.
I.T.E.
c UL US LISTED
9T96 E158873
UK CA
PT03-002663T

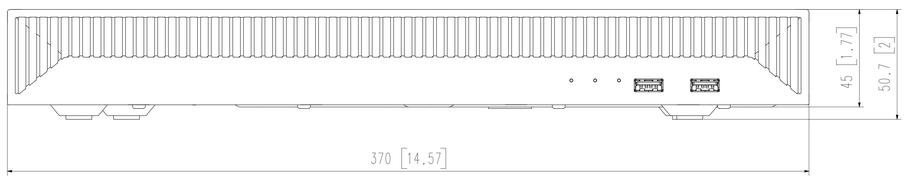
The following Page(s) are related to Miscellaneous-02. The next supplement, if applicable, will be identified with a new Supplement Page Heading.











3		
2		
1	CGR-1610	'25.07.02
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/1	Hanwha Vision

A0

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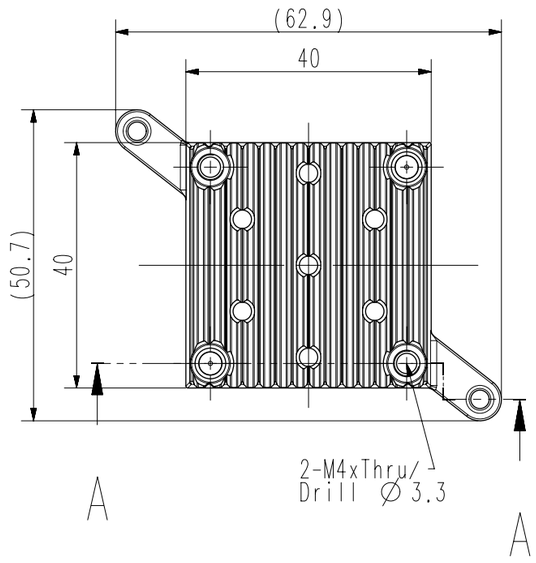
The following Page(s) are related to Miscellaneous-03. The next supplement, if applicable, will be identified with a new Supplement Page Heading.

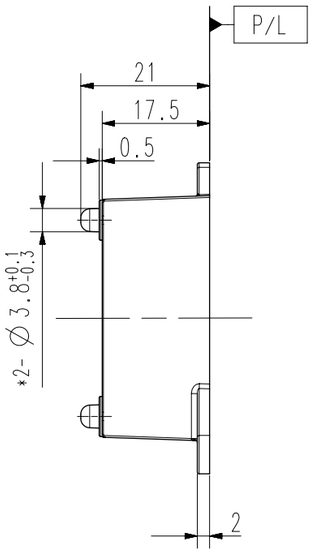
This parts should not contain any substances which are specified in AH60-0033K

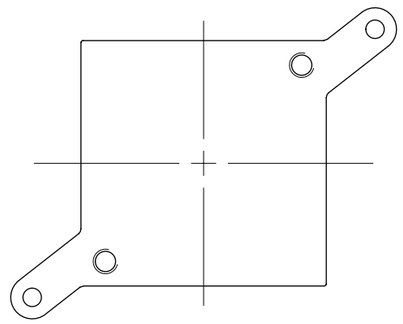
NO	PART NAME	CODE NO.	MATERIAL	Q'TY	REMARK
1	HEAT-SINK	EP07-002018A	ADC12	1	-

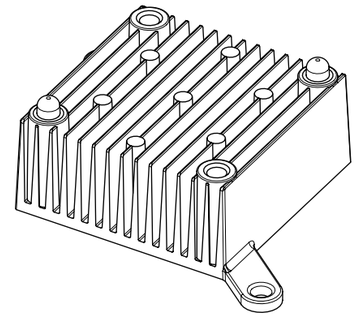
Coating Specification

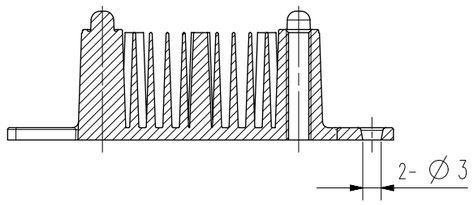
Process	Casting→Cutting→Sanding→Machining/Tapping→Degrease →Chromate











SECTION A-A

NOTE:Die-Casting

1. Material and Basic wall thickness : ADC, t2.0

2. Gate, P/L, Ejector Pin location must be handled with HVC designer.
3. Ejector pin stain must be less than 0.3 depth (▭), no flash is allowed.
4. Undescribed edge round must be less than R0.5, undescribed corners must be less than R0.3.
5. No Deformation, Air bubble, Shrinkage is allowed.
6. Every Flash on P/L must be less than 0.1.
7. Undescribed draft angles must be less than 0.5° .
8. * marks (Key dimensions) must be carefully handled.
9. Surface cutting level of Gate and Over-Flow must be equivalent with other surface cutting level.
10. Part Name, Code Number, Mold Number, Material, Model Name must be carved on the inner side of the part.
 - Location and Specs. must be handled with HVC designer.
11. External look and printing specification must follow separately distributed Design Specification data.
 - Including Surface cutting, Chromate, Sanding, Spray, Silk Print specifications.
12. Reliability must satisfy HVC standards.
13. Delivery packing specifications must be discussed separately.
14. All other issues must be handled with HVC designer.

Hanwha Vision APPROVAL 24.03.11 Hanwha Vision

STANDARD TOLERANCE

DIV	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5
0-16	±0.05	±0.1	±0.2	±0.2	±0.3
16-63	±0.05	±0.1	±0.2	±0.3	±0.4
63-250	±0.1	±0.2	±0.3	±0.4	±0.4
250-1000	±0.2	±0.3	±0.4	±0.5	±0.6

A3

CHANGE

⚠ Update dimensions (24.03.18 CHB.LEE)

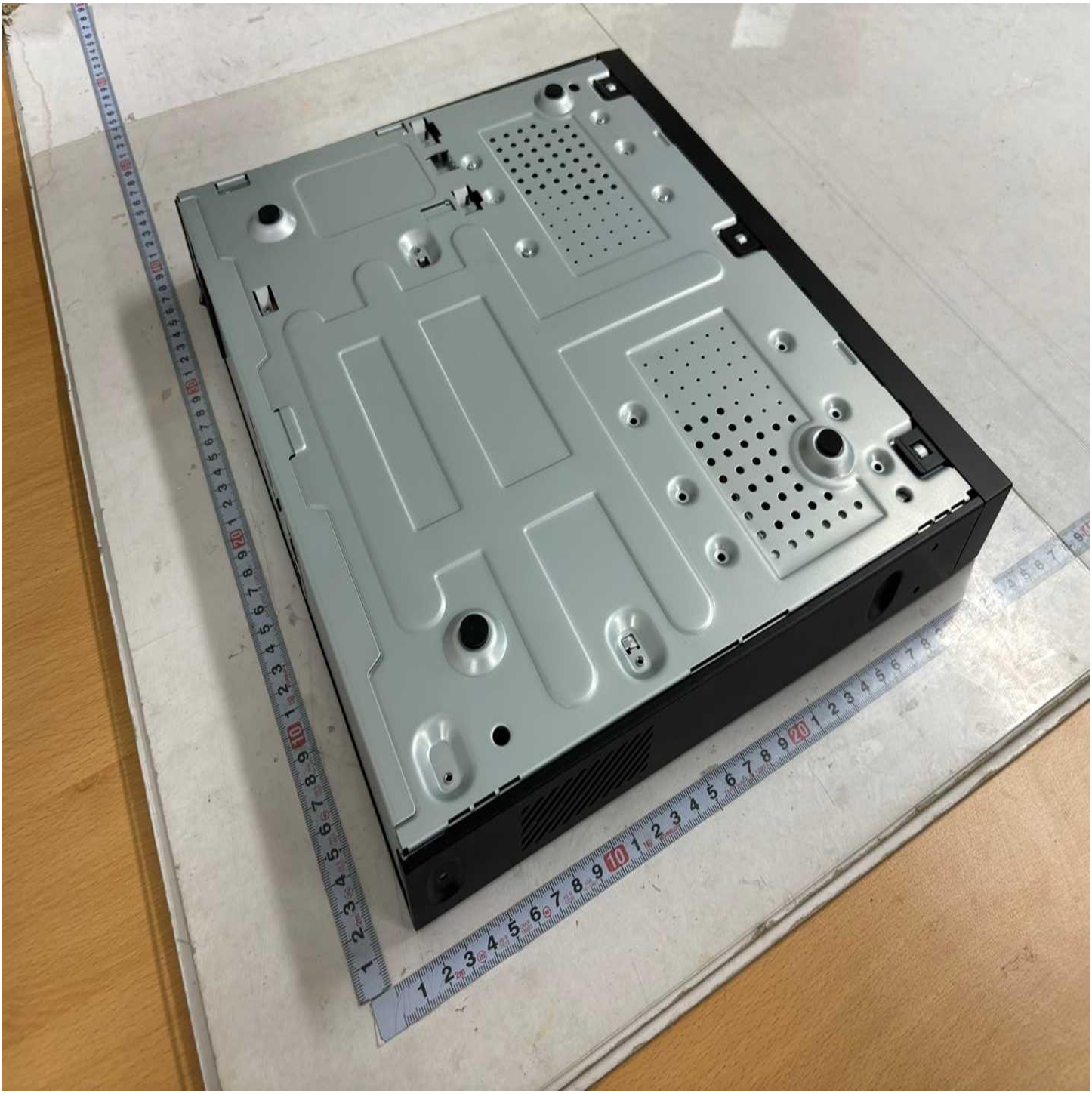
UNIT	mm	DESIGN	CHECK	APPROVAL	PART NAME	HEAT-SINK
SCALE	1/1	CHB.LEE		MH.PARK	MODEL NAME	WRN-2010S
		24.03.11		24.03.11	CODE NO.	EP07-002018A

Hanwha Vision

Photographs-01 Page-1



Photographs-02 Page-1



Photographs-03 Page-1



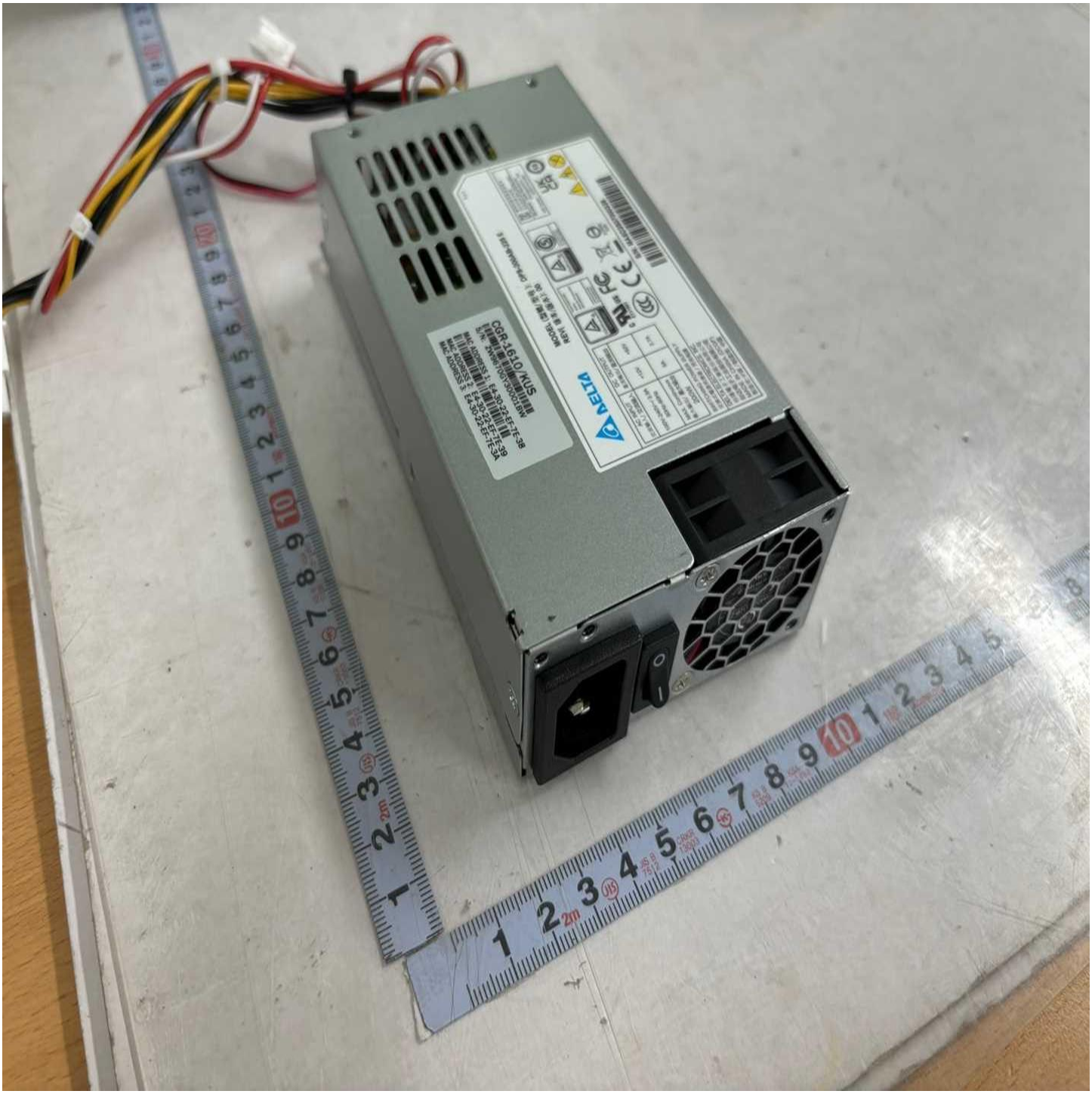
Photographs-04 Page-1



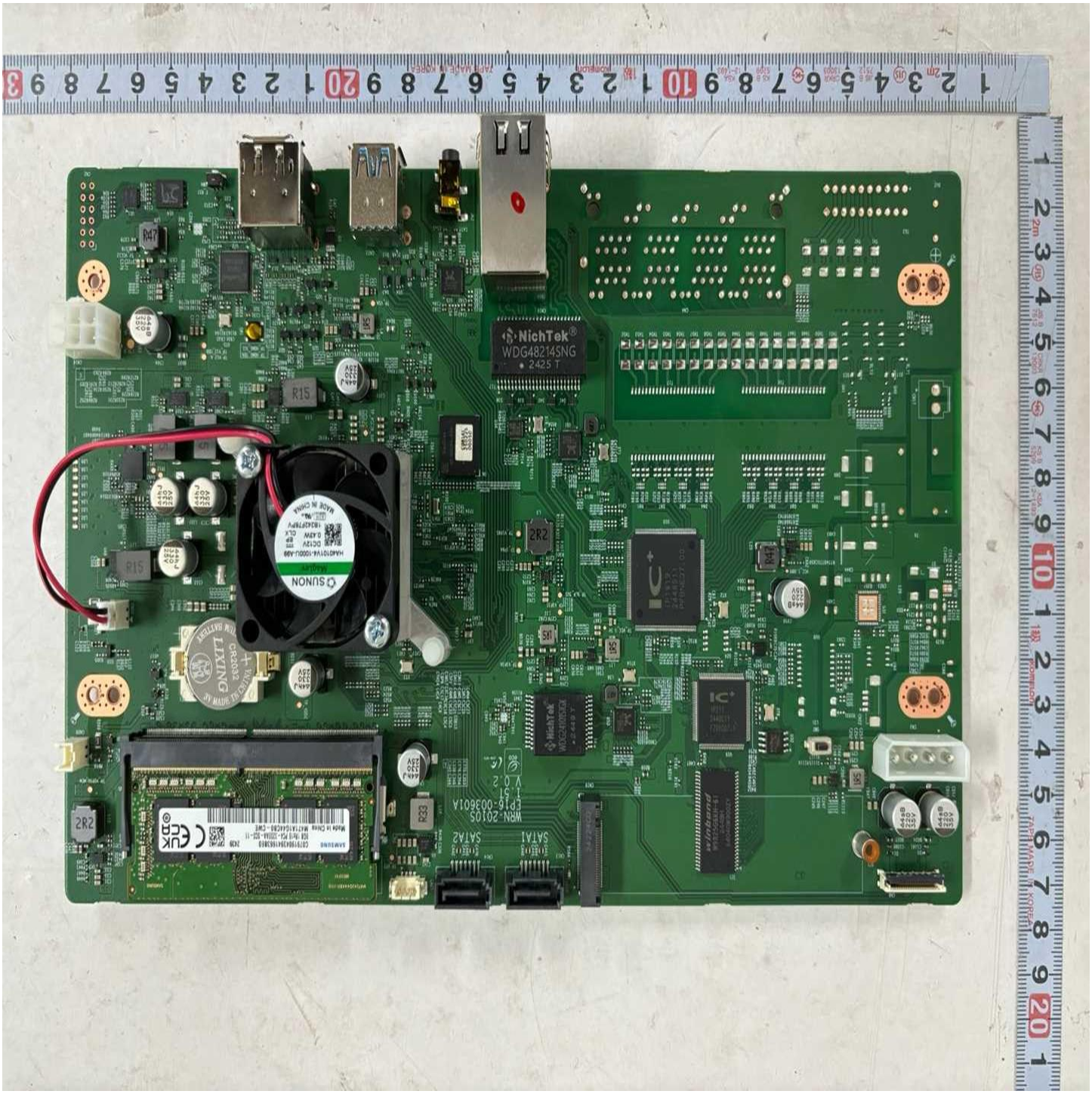
Photographs-05 Page-1



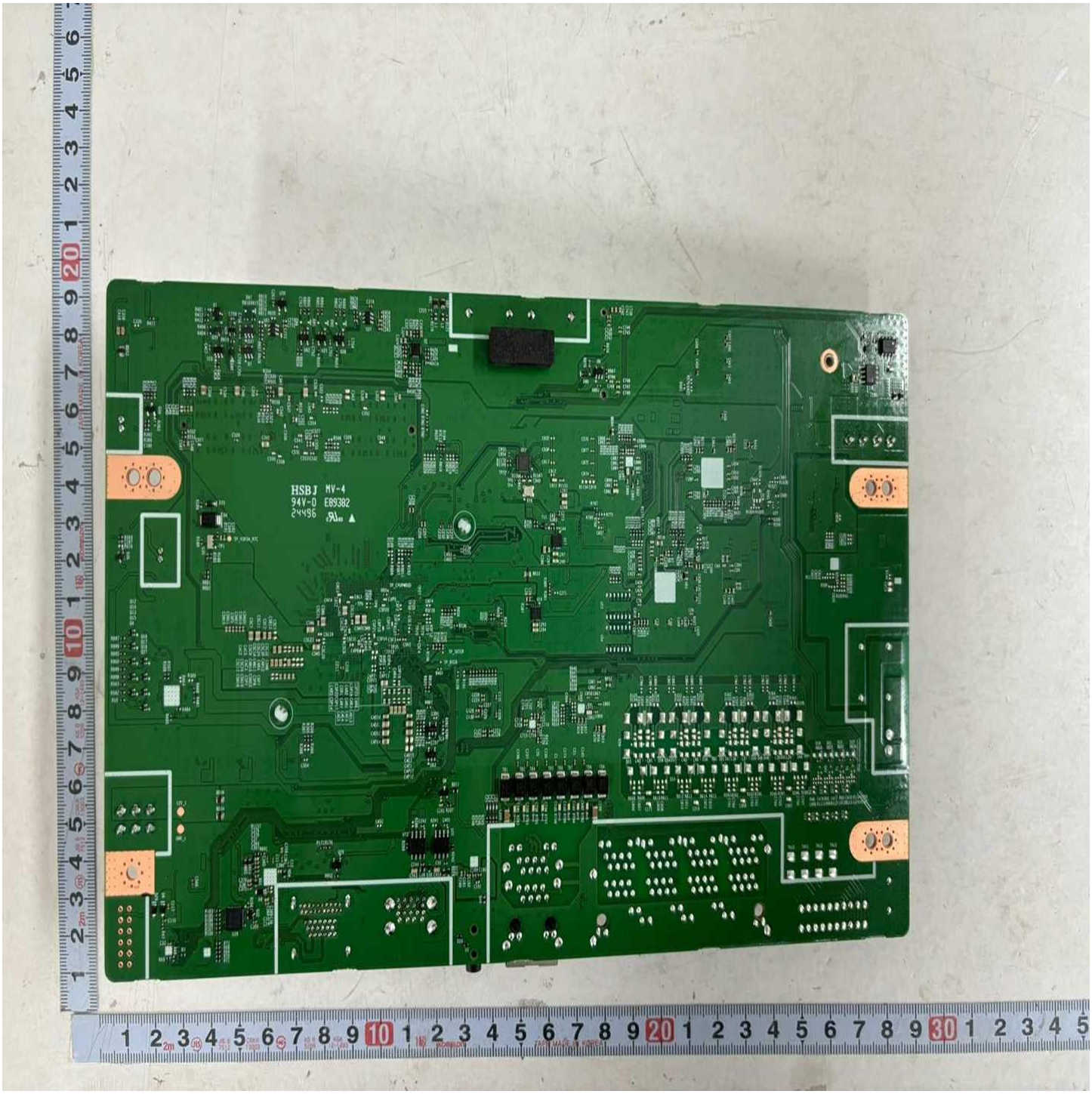
Photographs-06 Page-1



Photographs-07 Page-1



Photographs-08 Page-1



Photographs-09 Page-1

