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Please find attached the related material on Project

For your convenience, the below describes the related updates:

E158873-A6283-DescriptionUL
Figure-17-Total

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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:	VMS(Video Management Software) Appliance
Model:	BRR-P6410A2E, BRR-P3210A2E, BRR-X6410A2E, BRR-X3210A2E
Rating:	AC 100-240 V~, 50/60 Hz, 2.4 A for BRR-P6410A2E, BRR-P3210A2E AC 100-240 V~, 50/60 Hz, 2.1 A for BRR-X6410A2E, BRR-X3210A2E
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.

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Prepared By: Scott Han / Project Handler

Reviewed By: SoonHong Min / Reviewer

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

VMS(Video Management Software) Appliance consists of certified SMPS, DC Fan, maximum 8 EA hard disk-drives (optional) and numerous components mounted on PWB.

Rack-mounted installation of this equipment must be performed exclusively by personnel authorized by Hanwha Vision.

Model Differences

Model BRR-P6410A2E is basic model.

Model BRR-P3210A2E is identical to basic model except model designation and number of channels.

Model BRR-X6410A2E is identical to basic model except model designation, input rating and doesn't include AI board.

Model BRR-X3210A2E is identical to model BRR-X6410A2E except model designation and number of channels.

Test Item Particulars

Product group	end product
Classification of use by	Instructed 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 rack-mounted
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)	5000 m

Altitude of test laboratory (m).....: 2000 m or less

Mass of equipment (kg).....: 14.1

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 circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS) : All output ports
- 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

Additional Information

New (4791983572)

1. Testing of VMS(Video Management Software) Appliance, Model BRR-P6410A2E, BRR-P3210A2E, BRR-X6410A2E, BRR-X3210A2E was not considered necessary based upon previous evaluation under the CB Scheme. The CB Scheme Test Certificate and Report Ref. No. E158873-A6279-CB-1, Original dated 2025-11-20 was prepared by UL Solutions (Demko), 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)"
Symbols - Stand-by switch	"Stand-by" to be indicated by  (IEC 60417-5009)
Class I equipment -Terminal for main protective earthing	Provided adjacent to the main protective earthing terminal  (IEC 60417-5019)

Equipment for use in location where children are not likely to be present	"This equipment is not suitable for use in locations where children are likely to be present" (Instruction) or equivalent "Cet équipement ne convient pas à une utilisation dans des lieux pouvant accueillir des enfants" (Instruction) ou équivalent
Safety Instructions - Rack Mount	"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 (T_{ma}) specified by the manufacturer. 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)."
Hard Copy	A. IMPORTANT or ATTENTION or similar wording B. Please check 'Manuals' from our website, before connecting to the supply. C. Company website URL (https://www.~~)
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 models are required.					
BD1.3	Electric Strength Test Exemptions – This test is not required for the following models:					
	All models are required.					
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 (SMPS)	FSP GROUP INC	FSP300-50FCC	Input: 100-240 V~, 50-60 Hz, 5-2.5 A Output: +3.3 Vdc, 12 A, +5 Vdc, 12 A, +12 Vdc, 20 A, -12 Vdc, 0.3 A, +5 Vsb, 2.5 A Total power for all outputs: 300 W	QQJQ2/8	UL (E190414)	
Power cord set	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	SECC, Min. 1.0 mm thickness, see enclosure for more dimension.	--	--	
Enclosure - Rear (Metal) (Fire / Mech / Elec)	Interchangeable	Interchangeable	SECC, Min. 1.0 mm thickness, see enclosure for more dimension.	--	--	
Enclosure - Side/Bottom (Metal) (Fire / Mech / Elec)	Interchangeable	Interchangeable	SECC, Min. 1.0 mm thickness, see enclosure for more dimension.	--	--	
Side Bracket for rack-mounting	Interchangeable	Interchangeable	SECC, Min. 2.0 mm thickness, see enclosure for more dimension.	--	--	
Frame (Metal)	Interchangeable	Interchangeable	Aluminum, Min. 2.0 mm thickness, see	--	--	

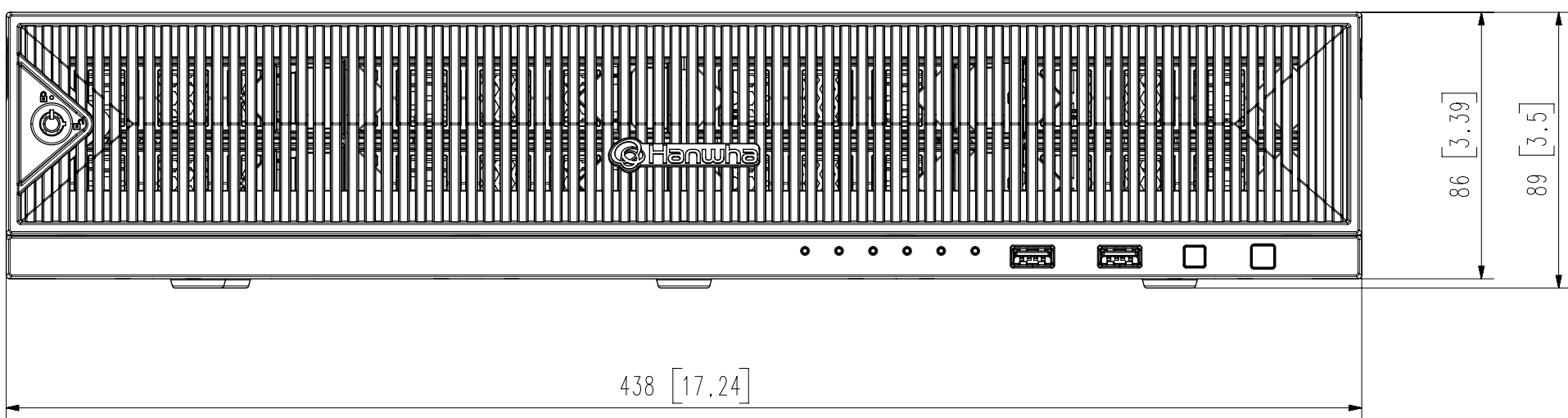
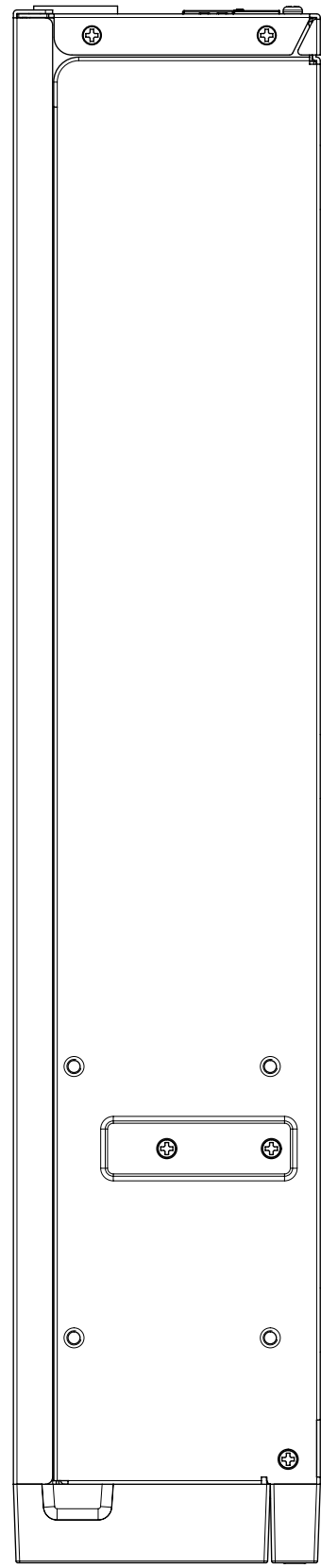
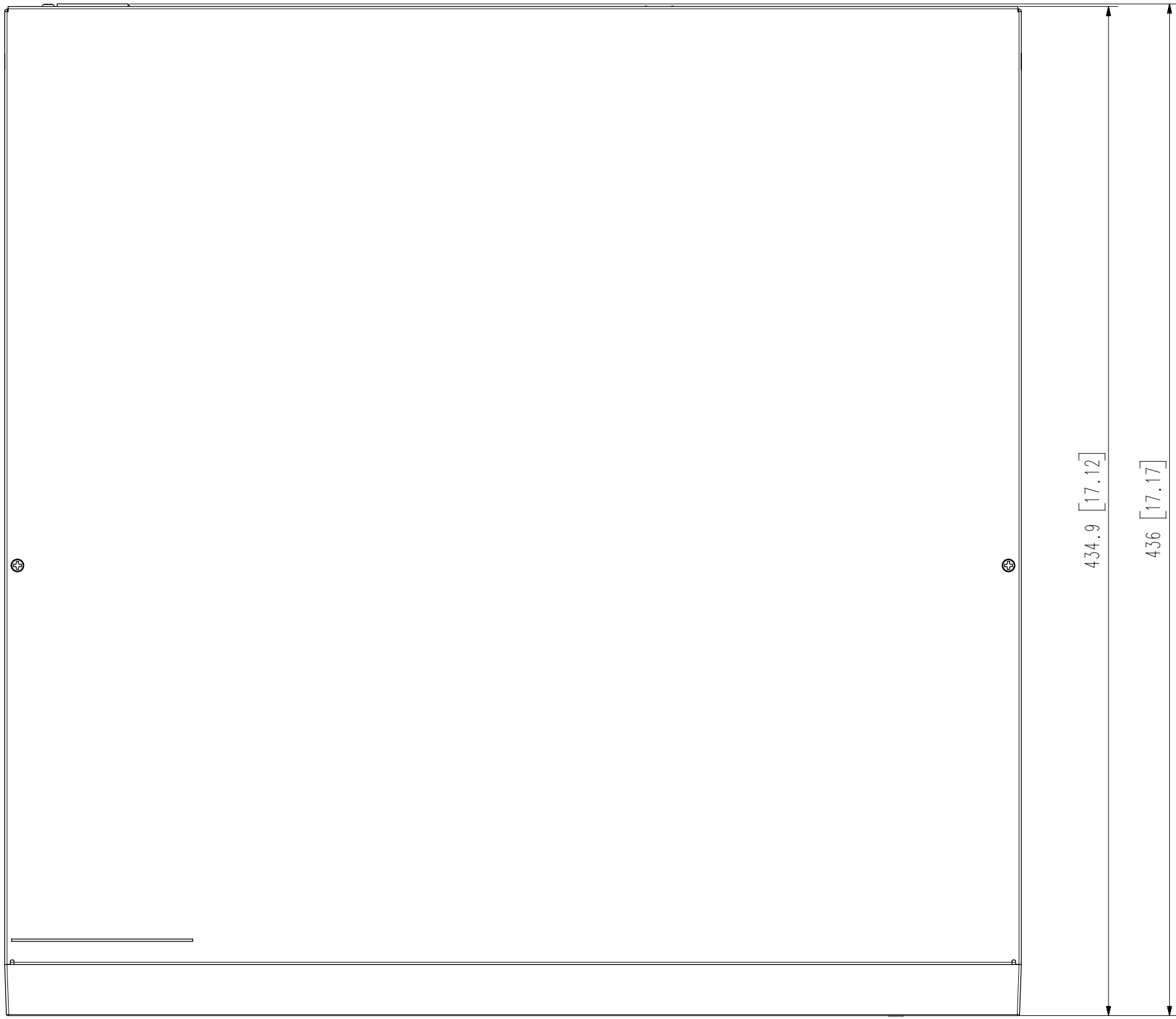
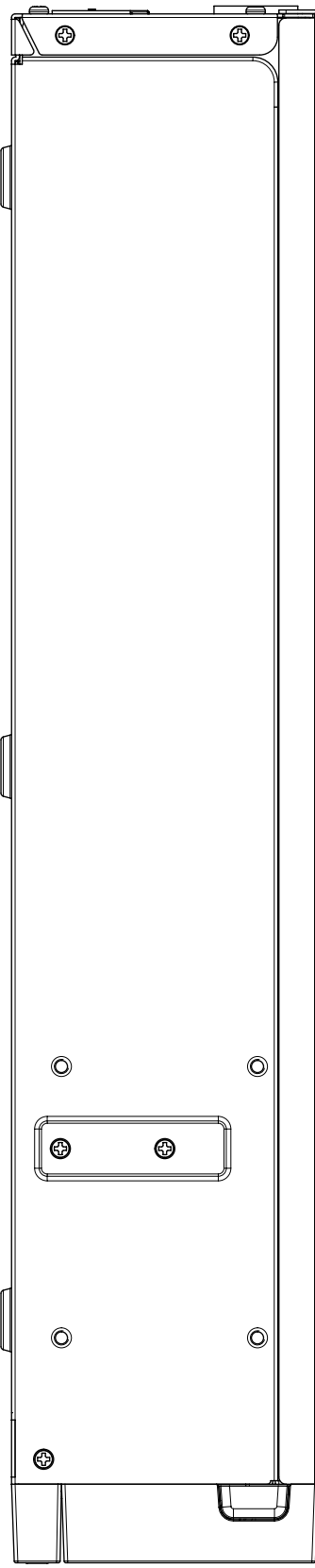
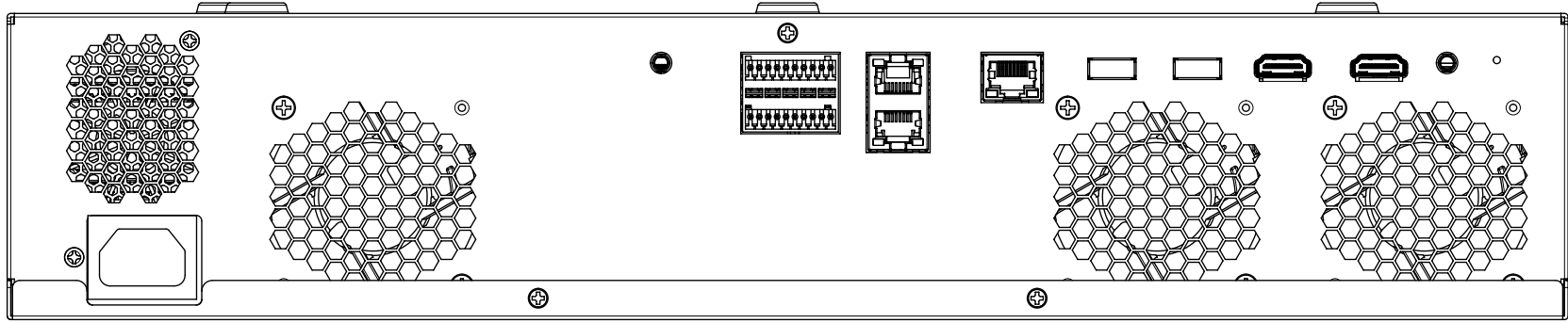
			enclosure for more dimension.			
Front USB Cover (Plastic)	LOTTE CHEMICAL CORPORATION	HN-1068(f1)	Min. 1.5 mm thickness, rated Min. V-0, 130 deg. C	QMFZ2	UL (E115797)	
Front Filter Cover (Plastic)	LOTTE CHEMICAL CORPORATION	HN-1068(f1)	Min. 3.5 mm thickness, rated Min. V-0, 130 deg. C	QMFZ2	UL (E115797)	
DC Fan for Main board	COOLER MASTER CO LTD	FA09025H12(S)(P) B (Type: FA09025H12BPB)	12 Vdc, 0.28 A (N=4700, K=1169.0028, N/15000+K/2400 = 0.8004 < 1, MS1)	GPWV2	UL (E319075)	
DC Fan on rear enclosure	SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO., LTD	MF60251V1-1Q(Y) (Type: MF60251V1-1Q03U-S99)	3 provided, 12 Vdc, 0.08 A (N=4500, K=212.5764, N/15000+K/2400 = 0.3885 < 1, MS1)	GPWV2	UL (E77551)	
DC Fan on AI board	MinebeaMitsumi Inc	04520GA-12L-XY (Type: 04520GA-12L-AU-01)	12 Vdc, 0.09 A (N=6000, K=171.99, N/15000+K/2400 = 0.4717 < 1, MS1)	GPWV2	UL (E89936)	
Hard Disk Drive (Max. 8 EA) (Optional)	SANDISK TECHNOLOGIES, INC.	WD40PUZX	5 Vdc, 0.44 A and 12 Vdc, 0.55 A	--	--	
Hard Disk Drive (Max. 8 EA) (Optional) - Alternate	Interchangeable	Interchangeable	5 Vdc, 0.44 A and 12 Vdc, 0.55 A	--	--	
Lithium Battery (CN24)	WUHAN LIXING (TORCH) POWER SOURCE CO LTD	CR2032	Non-rechargeable, Lithium/manganese dioxide (Coin), Max Continuous Discharge C Current: 10 mA, Nominal Voltage: 3.0 Vdc	BBCV2	UL (MH26236)	

Reverse Current Protection Circuit for Lithium Coin Battery (CN24)	Interchangeable	Interchangeable	Diode (D16, Max reverse voltage 30 V, Max reverse current 1.0 A) and resistor (R268, 1.0 kohm) in series.	--	--	
USB Protection IC (USB 3.0: U20, U21 / USB 2.0: U30, U33)	Texas Instruments Incorporated	TPS2552DDBVR	2.5–6.5 Vdc, Continuous current: 1.5 A	QVGS2	UL (E169910)	
Heatsink for Main board	Interchangeable	Aluminium (Black or Silver)	Approx. overall size of 40.0 by 40.0 by 12.6 mm, Min. 0.8 mm thickness, secured on PWB by soldering, see enclosure for more dimension.	--	--	
Heatsink for AI board	Interchangeable	Aluminium (Black)	Approx. overall size of 20.0 by 20.0 by 10.0 mm, Min. 1.0 mm thickness, secured on PWB by bonding, see enclosure for more dimension.	--	--	
PWB	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 PGJ12 and PGAA	UL	

Enclosures

Type	Supplement Id	Description
Photographs	03-01	External 1
Photographs	03-02	External 2
Photographs	03-03	Front
Photographs	03-04	Rear
Photographs	03-05	Internal
Photographs	03-06	Internal SMPS
Photographs	03-07	Main Board top with AI board and DC Fan
Photographs	03-08	Main Board bottom
Photographs	03-09	Main Board top without heatsink
Photographs	03-10	AI board top with DC Fan
Photographs	03-11	AI board bottom
Diagrams	04-01	Enclosure Drawing
Diagrams	04-02	Heatsink Diagram for Main board
Diagrams	04-03	Heatsink Diagram for AI board
Diagrams	04-04	Side Bracket Drawing
Manuals	06-01	Manual
Miscellaneous	07-01	Label

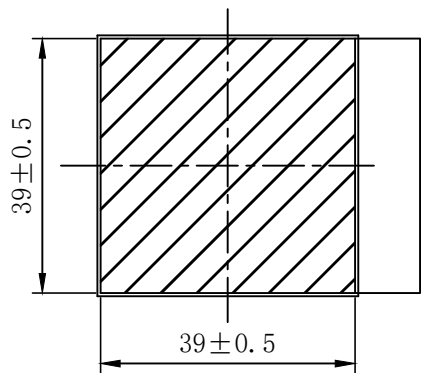
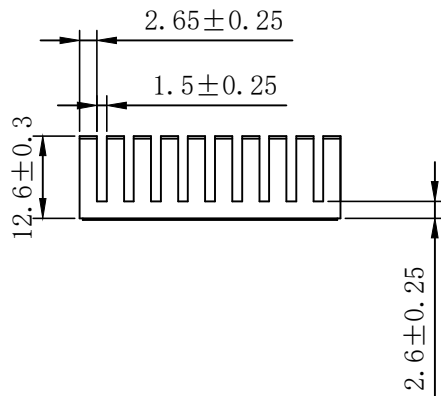
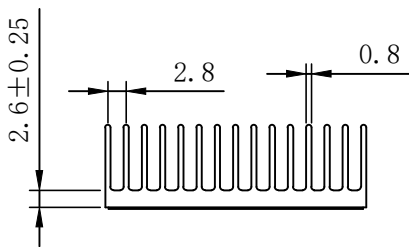
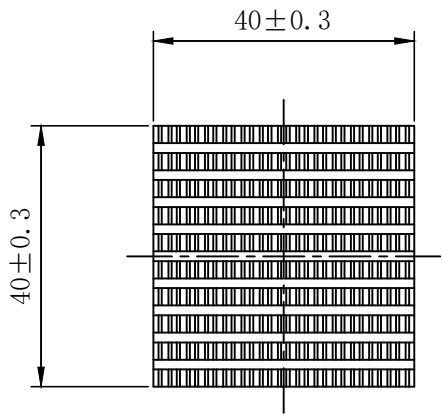
The following Page(s) are related to Diagrams-01. The next supplement, if applicable, will be identified with a new Supplement Page Heading.



3		
2		
1	XRN-6420RB2	'24.08.05
No.	MODEL NAME	DATE
Unit:mm[inch] SCALE:1/2		Hanwha Vision

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

版本	描述	位置	变更者	审核	日期
A0	新版发行				



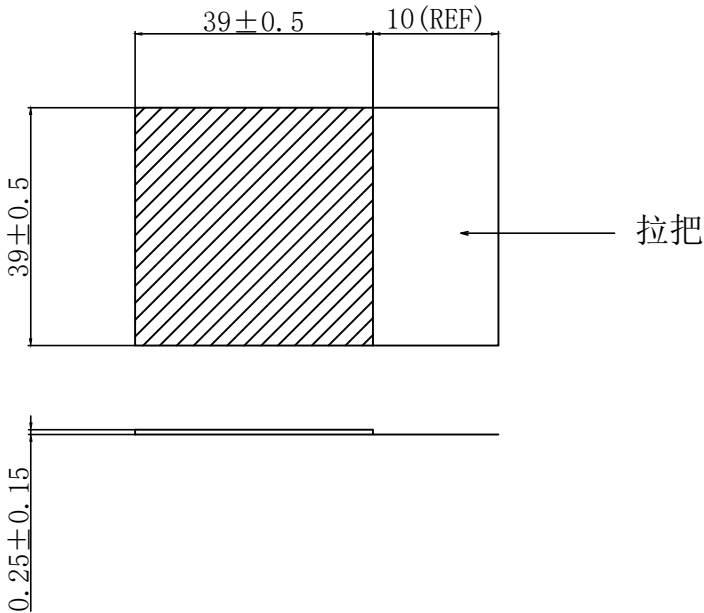
技术要求:

- 1.材质:AL6063-T5
- 2.表面处理: 阳极黑色
- 3.产品表面不能有压痕、碰伤等
- 4.标示 ① ~ ⑧ 为 重点检验尺寸
5. 产品须符合RoHs2.0 要求
6. 外观标准B级, 未注公差M2

成品图面

材 质 AL6063-T5		SCALE 1/2	同裕电子有限公司 TUNG YU ELECTRONIC CO.,LTD.		
表面处理 阳极黑色		SHEET 1/1			
选 择			UNIT mm	名称 散热片	
DIM. TOL.±	F	M1	M2	C	
0-6	0.05	0.10	0.20	0.25	
>6-30	0.10	0.20	0.30	0.50	
>30-120	0.15	0.30	0.50	0.80	
>120-400	0.20	0.50	0.80	1.20	
>400-1000	0.30	0.80	1.20	2.00	
>1000~	0.50	1.20	2.00	3.00	
角度	0.50°	1.00°	1.20°	1.50°	
			SIZE A4	料号 101023130沿用	客户代码
			制图 JUN 20201218	审核	核准

版本	描述	位置	变更者	审核	日期
A0	新版发行				



技术要求:

1. 材质: 3M9473
3. 表面不可有刮碰伤, 破损, 脏污, 气泡及未切断等不良
4. 标示 ① ~ ⑧ 为重点检验尺寸
5. 产品须符合RoHs2.0 要求
6. 外观标准B级, 未注公差M2

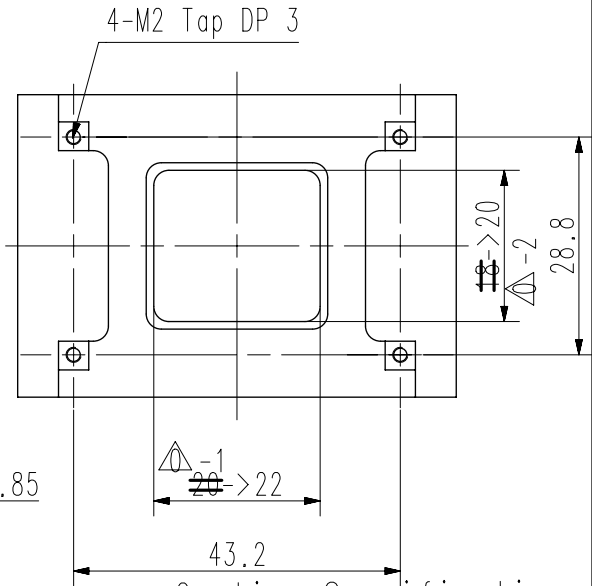
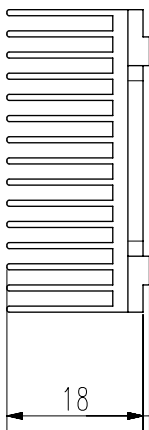
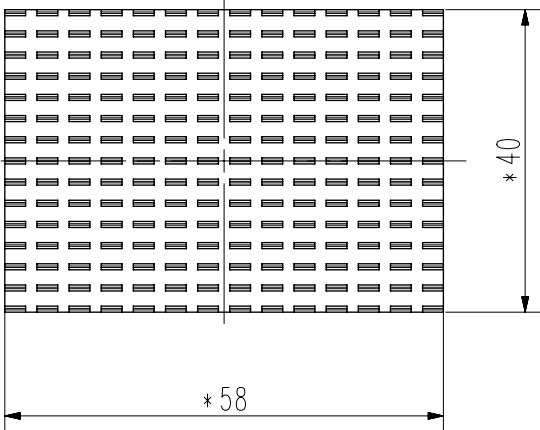
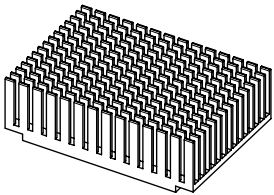
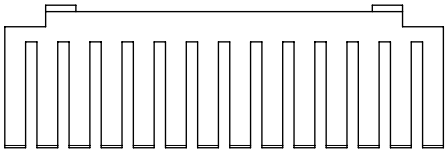
配件图面

材 质					SCALE 1/2	同裕电子有限公司 TUNG YU ELECTRONIC CO.,LTD.			
3M9473					SHEET 1/1				
表面处理					UNIT mm	名称			
/						3M9473			
选 择	TOL.±	F	M1	M2	C	SIZE A4	料号 101023130沿用	客户代码	客户料号
DIM.									
0-6		0.05	0.10	0.20	0.25		JUN 20201218	审核	核准
>6-30		0.10	0.20	0.30	0.50				
>30-120		0.15	0.30	0.50	0.80				
>120-400		0.20	0.50	0.80	1.20				
>400-1000		0.30	0.80	1.20	2.00				
>1000~		0.50	1.20	2.00	3.00				
角度		0.50°	1.00°	1.20°	1.50°				

The following Page(s) are related to Diagrams-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	SINK,HEAT-NVIDIA_ORIN_AIB-800;AL6063-T5	EP07-001989A	Check note	1	-



Coating Specification

Surface Processing	Anodizing
Color	Black

NOTE

- Material and Basic wall thickness : AL6063-T5
- Gate, P/L, Ejector Pin location must be handled with HVC designer.
- Ejector pin stain must be less than 0.3 depth (凹), no flash is allowed.
- Undescribed edge round must be less than R0.5, undescribed corners must be less than R0.3.
- No Deformation, Air bubble, Shrinkage is allowed.
- Every Flash on P/L must be less than 0.1.
- Undescribed draft angles must be less than 0.5°.
- * marks (Key dimensions) must be carefully handled.
- Surface cutting level of Gate and Over-Flow must be equivalent with other surface cutting level.
- 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.
- External look and printing specification must follow separately distributed Design Specification data.
- Including Surface cutting, Chromate, Sanding, Spray, Silk Print specifications.
- Reliability must satisfy HVC standards.
- Delivery packing specifications must be discussed separately.
- All other issues must be handled with HVC designer.



STANDARD TOLERANCE

DIV	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5
0-16	±0.05	±0.1	±0.1	±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

CHANGE

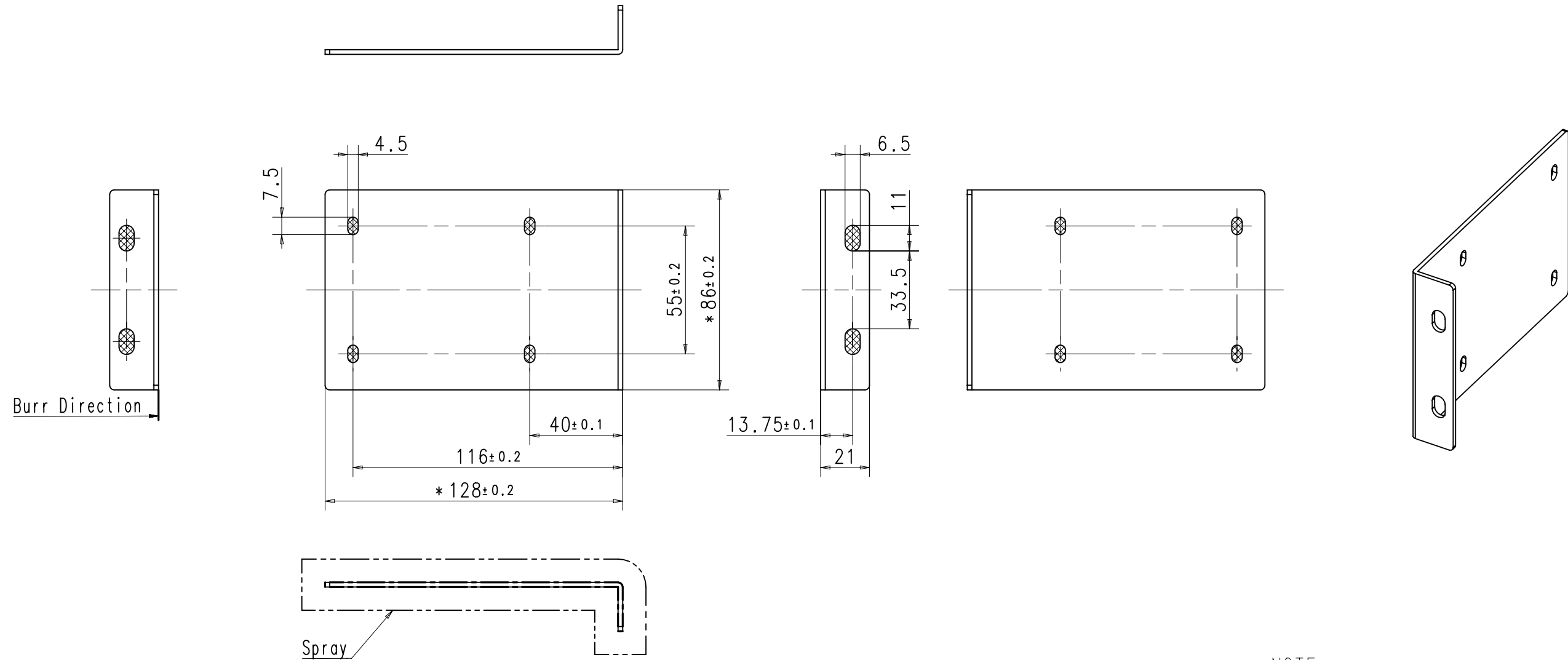
Δ-1,-2
Modify Grease area
18 -> 20
20 -> 22
-23.10.20 P.J.KIM-

UNIT	mm	DESIGN	CHECK	APPROVAL	PART NAME	SINK,HEAT-NVIDIA_ORIN_AIB-800;AL6063-T5
SCALE	1 / 1	P.J.KIM	T.K.CHANG	Y.S.CHOI	MODEL NAME	AIB-800
		23.08.18	23.08.18	23.08.18		
					CODE NO.	EP07-001989A



The following Page(s) are related to Diagrams-04. The next supplement, if applicable, will be identified with a new Supplement Page Heading.

	NO	PART NAME	CODE NO.	MATERIAL	Q'TY	REMARK
	1	BRACKET-RACK_PRN-6410B2	FC09-012068A	Check note	1	-



NOTE

1. Material and Thickness : SECC, t2.0
2. Spray Code : HTW-ML-2
 - Spray spec have to be same with HTW standard document "D20192403178"
3. Undescribed right-angle bending angles must be $90 \pm 0.2^\circ$.
4. No damage is allowed along the bending lines, also no warpage, scratch or dirt is allowed on the surfaces.
5. Burr height must be less than 0.03.
6. All other edges must be less than R0.3.
7. * marks (Key dimensions) must be carefully handled.
8. Surface must be degreased.
9. Undescribed dimension and geometry must be referred by 3D model.
10. Reliability must satisfy HTW standards.
11. Delivery packing specifications must be discussed separately.
12. All other issues must be handled with HTW designer.

STANDARD TOLERANCE

DIV	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5
0-16	± 0.05	± 0.1	± 0.1	± 0.2	± 0.2
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

Coating Specification

CODE No.		FC09-012068A
Color	Standard	D20192403178
	Code	HTW-ML-2
	Name	Metal Liquid Black



CHANGE		UNIT	mm	DESIGN	CHECK	APPROVAL	PART NAME	BRACKET-RACK_PRN-6410B2
		SCALE		1 / 2	P.J.KIM	M.H.PARK		
						20.07.18	20.07.18	20.07.18
		 Hanwha Techwin						CODE NO.

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) Do not allow children to access or operate this device. This is professional equipment and must be used only by qualified personnel.



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.



- This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

overview

BEFORE START

This manual provides operational information necessary for using the product and contains a description about each component part and its function as well as menu or network settings.

You have to keep in mind the following notices :

- Hanwha Vision retains the copyright on this manual.
- This manual cannot be copied without Hanwha Vision's prior written approval.
- We are not liable for any or all losses to the product incurred by your use of non-standard product or violation of instructions mentioned in this manual.
- Prior to opening the case, please consult a qualified technician first. Whenever this is needed power must be removed from the unit.
- 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.

Warning

Battery

Do not replace the internal battery yourself. There is a risk of explosion.

The following are the specifications of the battery you are using now.

- Normal voltage : 3V
- Normal capacity : 210mAh
- Continuous standard load : 0.4mA
- Operating temperature : -20°C ~ +60°C
(-4°F ~ +140°F)

CALIFORNIA USA ONLY

This Perchlorate warning applies only to primary CR (Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA.
"Perchlorate Material - special handling may apply,
See www.dtsc.ca.gov/hazardouswaste/perchlorate."



- 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;)

Moving fan blades

- Keep body parts away from fan blades.

CAUTION

- 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.
- Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
- 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.

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.

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.

Press **<OK>** on the system shutdown popup window and then remove the power cable to ensure a safe power off.

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 guaranteed operating temperature range of this product is 0°C ~ 40°C (32°F ~ 104°F).

This product may not work properly if you run right after a long period of storage at a temperature below the guaranteed one.

Prior to using a device that has been stored for a long period in low temperatures, allow the product to stand at room temperature for a period.

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.

Ethernet Port

This equipment is in door use and all the communication wirings are limited to inside of the building.

Security Precautions

The initial administrator ID is "**admin**" and the password should be set when logging in for the first time.

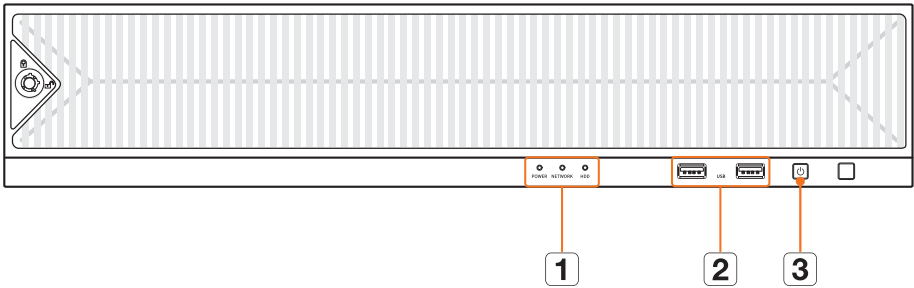
Please change your password every three months to safely protect personal information and to prevent the damage of the information theft.

Please, take note that it's a user's responsibility for the security and any other problems caused by mismanaging a password.

overview

PART NAMES AND FUNCTIONS (FRONT)

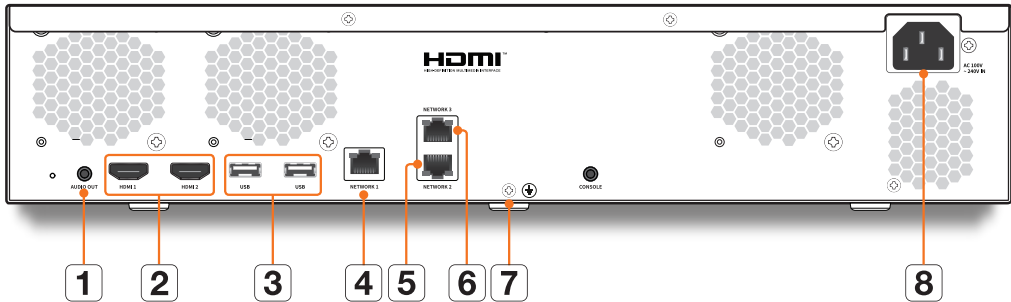
BRR-P6410A2E/BRR-P3210A2E
BRR-X6410A2E/BRR-X3210A2E



Name		Functions
1	LED Indicator	POWER : Shows the power ON/OFF status.
		NETWORK : Displays the status of the NETWORK2 port connection and data transmission.
		HDD : Displays the operation status of the HDD. The LED blinks when the HDD is active.
2	USB	Connects the USB devices. (USB 2.0 supported)
3	Power	It is used to turn on the power.

PART NAMES AND FUNCTIONS (REAR)

BRR-P6410A2E/BRR-P3210A2E
BRR-X6410A2E/BRR-X3210A2E



Name		Functions
1	AUDIO OUT	Audio signal output port.
2	HDMI 1 HDMI 2	HDMI connector port. - HDMI 1: Up to 3840 x 2160 30 Hz-supporting terminal to connect the primary monitor. - HDMI 2: Up to 1920 x 1080 60 Hz-supporting terminal to connect a secondary monitor.
3	USB	Connects the USB devices. (USB 3.0 supported)
4	NETWORK 1	Port for camera connections; it receives video from a camera.
5	NETWORK 2	Port recommended for connection with a network, web viewer.
6	NETWORK 3	Port to make a connection to the external iSCSI.
7	Ground Connection (Functional Earthing)	Port for connecting a separate ground cable. For safe handling of the device, please add a ground wire.
8	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.
- CONSOLE is designed for the service repair purpose only.

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.

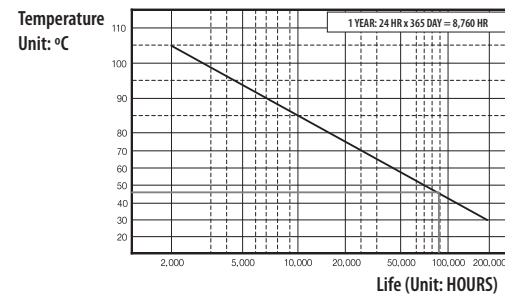


■ Depending on the HDD configuration and the surrounding temperature, there may be some noise from the product.

CHECKING THE INSTALLATION ENVIRONMENT

This product is an advanced security device with a high-capacity HDD and critical internal circuitry.

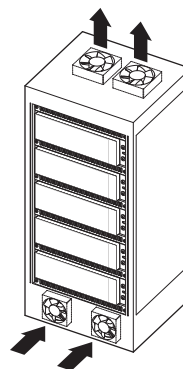
Note that an excessive internal temperature of the product may cause a system failure or a shortened product life (see the right figure). Keep in mind the following instructions before installing the product.



[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 products 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.



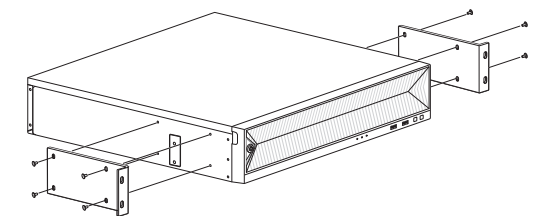
[Figure 2]

7. **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.
8. **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.
9. **Mechanical Loading** - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
10. **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.
11. **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

Install the Bracket-Rack as shown in the figure, and then fasten the screws on the left/right sides.

- Fix the screws not to be loosened by vibrations.



Example) BRR-P6410A2E

VMS(Video Management Software) Appliance

MODEL: BRR-P6410A2E

AC 100-240V~ 50/60Hz 2.4A

M/C: BRR-P6410A2E/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

MAC ADDRESS 3: XX-XX-XX-XX-XX-03

CAN ICES-3(A)/NMB-3(A)

MADE IN KOREA

Hanwha Vision Co., Ltd.



I.T.E.

US LISTED

9T96 E158873



PT03-002663T

VMS(Video Management Software) Appliance

MODEL: BRR-X6410A2E

AC 100-240V~ 50/60Hz 2.1A

M/C: BRR-X6410A2E/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

MAC ADDRESS 3: XX-XX-XX-XX-XX-03

CAN ICES-3(A)/NMB-3(A)

MADE IN KOREA

Hanwha Vision Co., Ltd.



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US LISTED

9T96 E158873



PT03-002663T















