



File E350024

Vol X4

Auth. Page 1

Issued: 2019-06-18

Revised: 2020-09-14

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT
(AZOT,AZOT7)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

Applicant: 354116 (Party Site)
C-PRO ELECTRONICS CO LTD
(352679-001) 5F 214 Galmachi-ro Jungwon-gu
Seongnam-si Gyeonggi-do 13216 KOREA

Listee: 2282350 (Party Site)
Digital Watchdog (E507366)
16220 Bloomfield Avenue
Cerritos CA 90703

Use of the Mark

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party. The UL Contracting Party for Follow-Up Services is listed in the addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

It is the responsibility of the Applicant, Manufacturer(s), and Listee/Classified Co. to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

Additional Responsibilities

Additional responsibilities, duties and requirements for the Applicant and Manufacturers are defined under Additional Resources at the following web-site: <http://www.ul.com/fus> . Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the Follow-Up Service Terms referenced below, please contact UL's Customer Service at <http://www.ul.com/aboutul/locations/> , select a location and enter your request, or call the number listed for that location.

Acceptance of Follow-Up Services

The Applicant and the specified Manufacturer(s) and any Listee/Classified Co. in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable service agreement is a Global Services Agreement ("GSA"), the Applicant, the specified Manufacturer(s) and any Listee/Classified Co. will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of a) use of the prescribed UL Mark, b) acceptance of the factory inspection, or c) payment of the Follow-Up Service fees. The Service Agreement incorporates such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking the following link: <http://services.ul.com/fus-service-terms>. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

Use and Ownership of the Follow-Up Service Procedure

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the Applicant, the specified Manufacturer(s), and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Definition of Terms

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

No Third Party Liability

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

Certification Body

UL LLC has signed below solely in its capacity as the certification body to indicate that this Follow-Up Service Procedure fulfills the requirements for certification documentation issued by the certification body.

Bruce A. Mahrenholz
Director
Conformity Assessment Programs (CPO)
UL LLC

LOCATION

1893743 (Party Site)
C-PRO VIETNAM COMPANY LIMITED
Dong Tho Industrial Cluster Dong Tho commune
Yen Phong District Bac Ninh province VIETNAM
Factory ID: CPROVN
UL Contracting Party for above site is: UL GmbH

(352679-001) 354116 (Party Site)
C-PRO ELECTRONICS CO LTD
5F 214 Galmachi-ro Jungwon-gu
Seongnam-si Gyeonggi-do 13216 KOREA
Factory ID: CPROKR
UL Contracting Party for above site is: UL GmbH



Multiple Listing Correlation Sheet

ML FILE NO. E472318

Issued: 2020-07-15

Revised: 2020-07-16

This page replaces the Multiple Listing Correlation Sheet between files E472318 and E350024, Vol X4.

WITHDRAWN

File		Volume	Page	Date:
E350024	Index	X4	1	17-Dec-20

Index

Product Type	Model/Type Reference	Report Reference #	Status
Outdoor Vandal IP Camera	DWC-MF4Wi (a), DWC-MV84WiA, DWC-MF4Wi (a)C(b), DWC-MV84WiAC(b) (a) can be any alphanumeric (b) can be any alphanumeric	E350024-A6001-UL	
Outdoor Bullet IP Camera	DWC-PB6M4T	E350024-A6002-UL	
Outdoor Vandal DOME IP Camera	DWC-PVF5M1TIR, DWC-PVF5M1TIRC(a).	E350024-A6003-UL	
Bullet IP Camera	DWC-MB44WiA, DWC-MB44WiAC(a), DWC-MB44Wi650, DWC-MB44Wi650C(a), DWC-MB44iALPR, DWC-MB44LPRC(a) (a) - Presence/Capacity of SD Card (can be any alphanumeric)	E350024-A6004-UL	
Outdoor Vandal DOME IP Camera	DWC-MV44WiA(a), DWC-MV44WA(a) (a) can be Blank or B (as enclosure color).	E350024-A6005-UL	
Outdoor Vandal DOME IP Camera	DWC-PVX16W, DWC-PVX16W4	E350024-A6006-UL	
Outdoor Bullet IP Camera	DWC-MB721M4TIR, DWC-MB721M6TIR, DWC-MB721M8TIR, DWC-MB721M4TIRDMP, DWC-MB721M6TIRDMP, DWC-MB721M8TIRDMP	E350024-A6007-UL	
Vandal IP Camera	DWC-PZ21M69T	E350024-A6008-UL	
IP CAMERA	DWC-MVA5Wi(a)T, DWC-MPVA5Wi(a)T	E350024-A6031-UL	
IP CAMERA	DWC-MVA2Wi(a)T, DWC-MPVA2Wi(a)T	E350024-A6033-UL	
IP CAMERA	DWC-MV72Di(a)T(b)	E350024-A6041-UL	
IP CAMERA	DWC-MD72Di(a)T(b)	E350024-A6042-UL	
IP CAMERA	DWC-MB62DiVT	E350024-A6043-UL	
IP CAMERA	DWC-MV82DiVT(a)	E350024-A6045-UL	
IP CAMERA	DWC-MV45WiAT(a), DWC-MPV45WiAT(a)	E350024-A6046-UL	

UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 3rd Ed, Issued: 2019-12-13 (Audio/video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, Issued: 2019-12-13 (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:	IP CAMERA
Model:	DWC-MV45WiAT(a), DWC-MPV45WiAT(a)
Rating:	12 Vdc, 0.69 A or PoE(802.3af), 0.22 A
Applicant Name and Address:	C-PRO ELECTRONICS CO LTD 5F 214 GALMACHI-RO JUNGWON-GU SEONGNAM-SI GYEONGGI-DO 13216 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.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

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

IP CAMERA has been designed for INDOOR or OUTDOOR use and integrated a bracket for wall or ceiling mount.

It is a commercial equipment supplied from adapter or PoE (Power over Ethernet) and installed by instructed personnel.

Model Differences

Basic model is DWC-MV45WiAT(a).

Model DWC-MPV45WiAT(a) is identical to basic model except for model designation.

The symbol (a) can be Alphanumeric, hyphen or blank not affecting safety.

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	12Vdc, 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)	50 Outdoor: minimum -20
IP protection class	IP 68
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)	1.27

Technical Considerations

- ☐ The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of : 50°C
- ☐ Mains supply tolerance (%) or absolute mains supply : No direct connection
- ☐ The Risk Group of a lamp or lamp system (including LEDs) is : RG 1
- ☐ The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual
- ☐ The outdoor equipment/enclosure was evaluated for use in an ambient temperature range of: -20 °C to +50 °C

Additional Information

4789627721

- Continuous operation with LED on.

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, Trademark or File Number
Equipment identification marking – model identification	Model Number
Equipment rating marking – ratings	Input Ratings (voltage, frequency/dc, current/power) Output Ratings (voltage, frequency/dc, current/power)
Outdoor enclosure type	Type 3, 3X, 3S, 3SX, 4, 4X, 6, 6P, "Raintight", "Rainproof", "Watertight", "Corrosion Resistant", "Dusttight" Enclosure
Hard Copy	A. ATTENTION or IMPORTANT B. Please check 'Manuals' from our website, before connecting to the supply. C. Company website URL (https://www.~~)
Website Manual-1	This product is intended to be supplied by a Listed Power Supply Unit marked "Class 2" or "LPS" or "PS2" and 12 Vdc, 0.69 A or PoE(802.3af), 0.22 A.
Website Manual-2	The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802.3.af shall be a UL Listed device with the output evaluated as a Limited Power Source as defined in UL 60950-1 or PS2 as defined in UL 62368-1.

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					

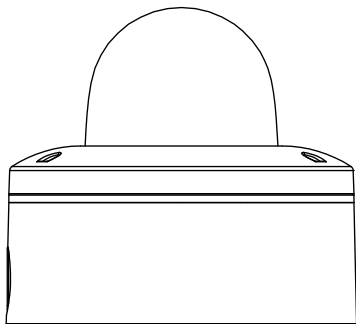
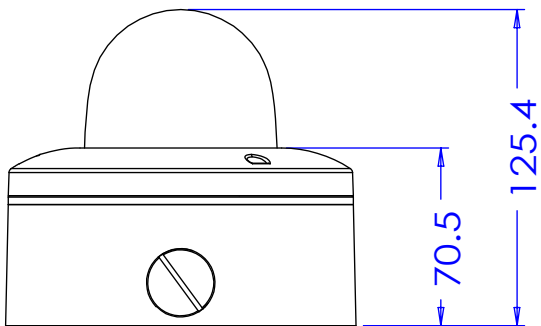
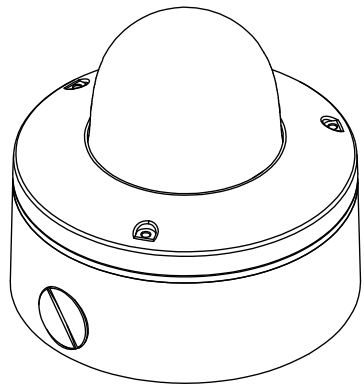
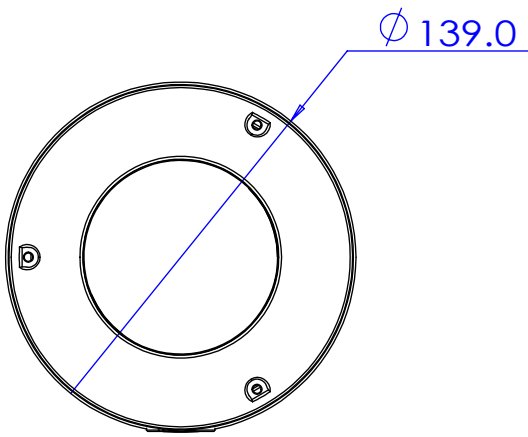
BE1.0	Sample and Test Specifics for Follow-Up Tests at UL				
Model	Component	Material	Test	Sample (s)	Test Specifics
N/A	N/A	N/A	N/A	N/A	N/A

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
Metal enclosure	Interchangeable	Interchangeable	Aluminum alloy, see enclosure for dimension.	-	-	
Plastic enclosure	SABIC INNOVATIVE PLASTICS B V	143R(f1)	Min. 1.50 mm thickness, rated HB, 130 deg. C, see enclosure for dimension.	QMFZ2/8 (E45329)	UL/cUL	
Internal Plastic	Interchangeable	Interchangeable	Min. HB	QMFZ2	UL	
Gasket for enclosures	DOW TORAY CO., LTD.	RBB-6670-70	HB, Min. 0.81 mm, 150 deg.C, Gasket Test was conducted under E350024-A6002.	QMFZ2 (E55519)	UL	
Transformer (TRANS2) in PoE board	BOB TECH	CP1312-B	130 deg. C, see enclosure for more detail.	-	-	
Transformer (TRANS2) in PoE board - Alternate	SH.E Co., Ltd.	CP1312-B	130 deg. C, see enclosure for more detail.	-	-	
Opto-coupler (PC5) in PoE board	EVERLIGHT ELECTRONICS CO LTD	EL357N	Double protection optical isolators, providing 3750 Vac isolation	FPQU2	UL (E214129)	
Opto-coupler (PC5) in PoE board - Alternate	TOSHIBA ELECTRONIC DEVICES & STORAGE CORPORATION	P181 (f), (f) - May be followed by A through L, may be prefixed by TL.	Single protection optical isolators, providing 3750 Vac isolation	FPQU2/8	UL (E67349)	
Rechargeable lithium coin battery (BT1)	SEIKO INSTRUMENTS INC MICRO- ENERGY DIV	MS621FE	Max. Charging Current: 300 mA, Max. Temperature 60 deg. C	BBCV2	UL (MH15628)	


Internal wiring	Interchangeable	Interchangeable	Marked VW-1, Min. 80 deg.C, 30 V	AVLV2	UL	
Thermal pad	Interchangeable	Interchangeable	Min HB, Min 100 deg.C	QMFZ2	UL	
PWB	Interchangeable	Interchangeable	V-0, 130 deg.C	ZPMV2	UL	
Outdoor Label	Interchangeable	Interchangeable	Outdoor Use, Max Temp 100 deg. C, Min Temp-40 deg.C	PGDQ2or PGJ12	UL	
LED	HELIO Optoelectronics Corp.	XPEIFR-L2	Vf: 2.6 Vdc (Max.), wavelength: 850 nm (typical)	-	-	

Enclosures

Type	Supplement Id	Description
Photographs	03-01	Front View
Photographs	03-02	Rear View
Photographs	03-03	Internal View
Photographs	03-04	Main Board Top
Photographs	03-05	Main Board Bottom
Photographs	03-06	Lens Part
Photographs	03-07	IR LED board
Photographs	03-08	Cable Enclosure
Diagrams	04-01	Diagram
Manuals	06-01	Manual
Miscellaneous	07-01	Dual language safety labeling CRD
Miscellaneous	07-02	Transformer (Trans2) Specification (BOB TECH)
Miscellaneous	07-03	Transformer (Trans2) Specification (SH.E CO)
Miscellaneous	07-04	Label



금형 제품에 대한 공차		기계가공에 대한 공차	
치수 범위	공 차	치수 범위	공 차
10以下	0.02	6以下	0.01
10以上 50以下	0.03	6以上 30以下	0.02
50以上 100以下	0.05	30以上 120以下	0.03
100以上 300以下	0.07	120以上 400以下	0.05
300以上	0.10	400以上 1000以下	0.08

DATE	SCALE		MATERIAL		DWG-NO.	REV.
2016.02.24	1 :3		A			A
		DESIGNED	CHECKED	APPROVED	DESCRIPTION 3.0	
		N.S.KIM			NK6	



MEGApiX® IVA+™ model	5MP model
DWC-MPV45WiATW	DWC-MV45WiATW



Default Login Information: admin | admin

When logging into the camera for the first time, you must setup a new password. You can set the new password using the DW® IP Finder™ software or directly from the camera's browser menu.

WHAT'S IN THE BOX

Quick Setup and Download Guide		1	Screws and Plastic Anchors – 4pcs		1 set
Mounting Template		1	Hex Wrench		1
Test Video Cable		1	Star Screwdriver		1
DC Plug Cable		1	Moisture Absorber and Guide		1 set

NOTE: Download all your support materials and tools in one place

- Go to: <http://www.digital-watchdog.com/resources>
- Search your product by entering the part number in the **'Search by Product'** search bar. Results for applicable part numbers will populate automatically based on the part number you enter.
- Click **'Search'**. All supported materials, including manuals and quick start guide (QSGs) will appear in the results.



Attention: This document is intended to serve as a quick reference for initial set-up. It is recommended that the user read the entire instruction manual for complete and proper installation and usage.

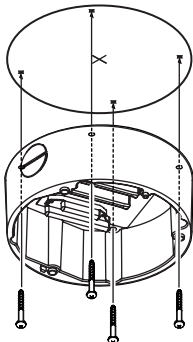
Tel: +1 (866) 446-3595 / (813) 888-9555

digital-watchdog.com

Technical Support Hours:
9:00 AM – 8:00 PM EST, Monday through Friday

STEP 1 - PREPARING TO MOUNT THE CAMERA

- The mounting surface must bear five times the weight of your camera. Do not let the cables get caught in improper places or the electric line cover to be damaged. This may cause a breakdown or fire.
- 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.
- CAUTION: There is a risk of explosion if the battery is replaced incorrectly and it should be replaced only with the same battery. ATTENTION: Il y a risque d'explosion si la batterie est remplacée par une batterie de type incorrect. Mettre au rebut les batteries usages conformément aux instructions.
- Used batteries must be disposed of according to local regulations or the battery manufacturer's instructions. Disposing of batteries in a fire or in a hot oven, or mechanically crushing and cutting them may cause an explosion.
- Leaving the battery in very high temperature or low air pressure environments may result in an explosion or leak of flammable liquids or gases.
- This product is intended to be supplied by a UL Listed Power Supply Unit marked "Class 2" or "LPS" or "PS2" and rated 12 Vdc, 0.69A min.
- The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802-3af 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.
- For the installation, detach the camera module from the junction box. Use the Star Screwdriver included to loosen the three screws at the base of the camera module.
- Using the mounting template sheet or the camera itself, mark and drill the necessary holes in the wall or ceiling.
- Secure the camera's junction box to the mounting surface using the included screws and anchors.

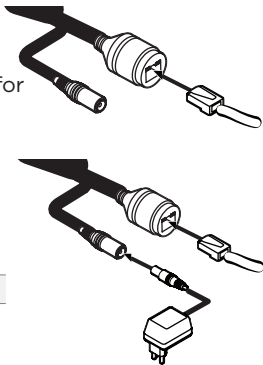


STEP 2 - POWERING THE CAMERA

Pass the wires through and make all necessary connections. See STEP 4 for more information.

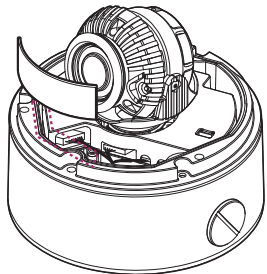
- NETWORK CONNECTIONS – Using a PoE Switch or PoE Injector, connect the camera using an Ethernet cable for both data and power.
- NETWORK CONNECTIONS – Not using PoE Switch or PoE Injector, connect the camera to the switch using an Ethernet cable for data transmission and use a power adapter to power the camera.

Power requirements	Power consumption
DC12V, PoE (IEEE 802.3af class 3). Adapter not Included.	DC12V: max 8.3W PoE: max 10.5W

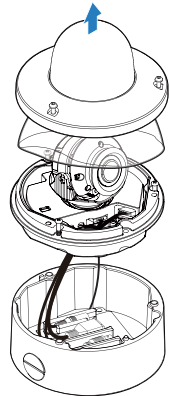


STEP 3 - INSTALLING THE CAMERA

- Once all cables are connected, make sure they are positioned properly and out of the way (see STEP 4). Attach the camera module to the junction box. Use the Star Screwdriver to secure the camera in place.
- Install the moisture packet in the base of the camera module.
 - Remove the moisture absorber from the packaging.
 - Cut the card and folder along the dotted line.
 - Place the moisture absorber under the camera's lens module.

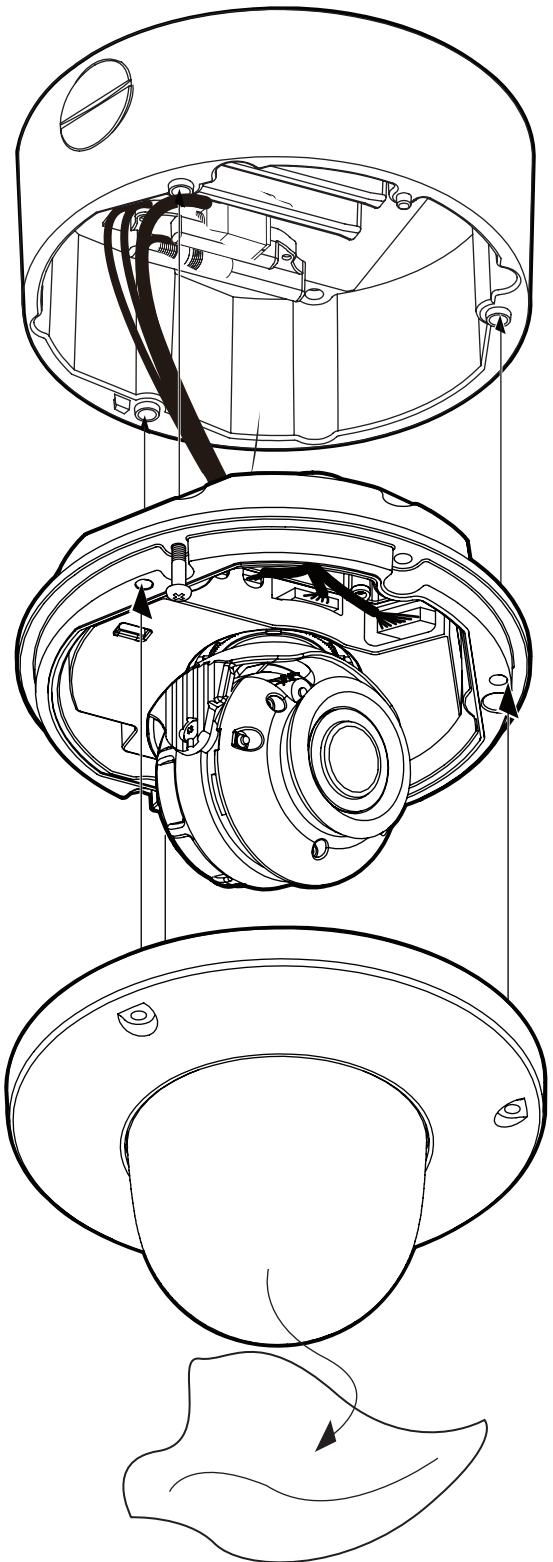
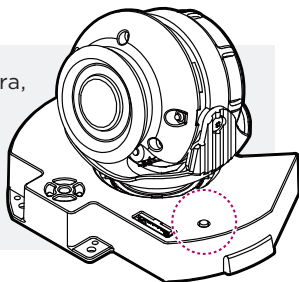


- Adjust the camera's tilt and angle using its 3-axis gimbal to match the installation's needs.
 - Pan: 360°
 - Tilt: 75°
 - Rotation: 355°
- Remove the protective film between the dome and the camera module.
- Attach the camera's dome cover to the camera module using the Hex Wrench included.
- Once the installation is complete remove the protective film from the camera dome.



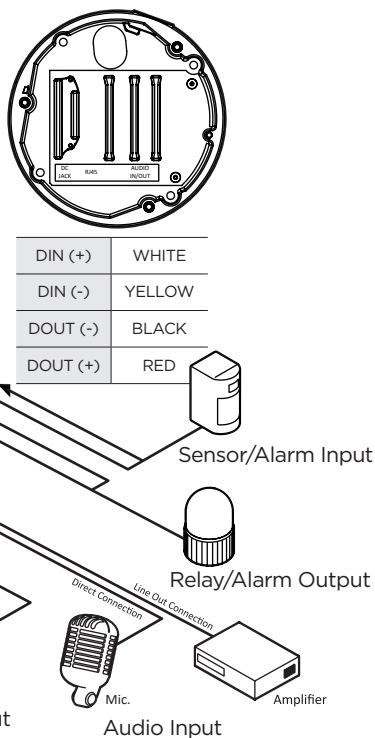
WARNING DO NOT TOUCH THE SURFACE OF THE BUBBLE. CleanView™ Hydrophobic Dome Coating has been applied to the camera's dome.

Resetting the camera: To reset the camera, use the tip of a paper clip or a pencil and press the reset button. Pressing the button for five (5) seconds will initiate a camera-wide reset of all the settings, including network settings.



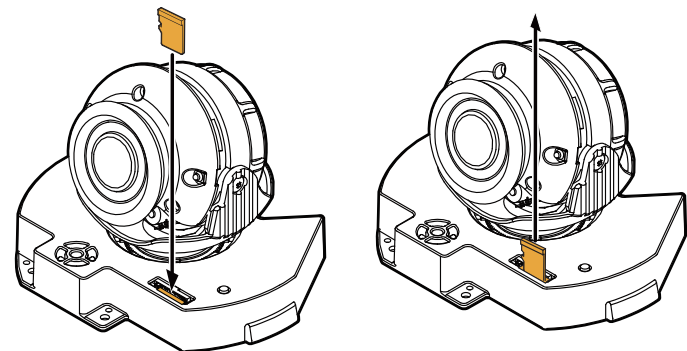
STEP 4 – CABLING

Use the diagram below to properly connect power, network, audio, alarm and sensors to the camera. Once all cables are connected, organize the cable outlets in the cable holder at the base of the junction box. This keeps the cables from getting caught between the camera module and junction box.



STEP 5 – MANAGING THE SD CARD

1. To install the camera's SD Card, locate the SD card slot at the base of the camera module by removing the cover dome.
2. Insert class 10 SD/SDHC/SDXC card into the SD card slot by pressing the SD card until clicks.
3. To remove the SD card, press the card inward until it clicks to release from the card slot then pull out from the slot.



NOTE: Maximum SD Card size supported: 64GB. When inserting the SD card into the card slot, the SD card's contacts should be facing upward, as shown in the diagram.

STEP 6 – DW® IP FINDER™

Use the DW IP Finder software to scan the network and detect all MEGApix® cameras, set the camera's network settings or access the camera's web client.

Thumbnail view

Select network to scan

Filter device type to scan

Scan devices

Show/hide thumbnail view

Refresh thumbnail view

Bulk IP assignment

Firmware upgrade

Firmware version

Camera's uptime

Open Device configuration settings

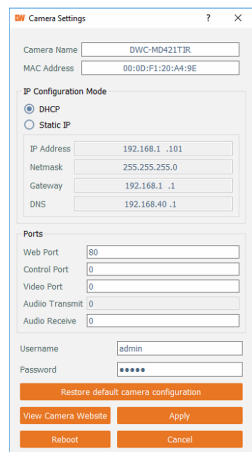
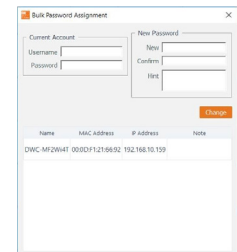
Device's information

Name	IP Address	Model	MAC Address	Netmask	Gateway	Port	DHCP	Version	Ping Test	IP Conf.	Uptime
DWC-MP-TZ30X	192.168.150.34	DWC-MP-TZ30X	00:07:DB:19:10:1A	255.255.255.0	192.168.150.1	80	Disabled	1.9.94-X2_release	Ping	Click	--
DWC-MV44WA	192.168.150.40	DWC-MV44WA	00:0D:F1:21:53:8F	255.255.255.0	192.168.150.1	80	Disabled	A2.01.02_20180619	Ping	Click	28day 14hrs 1mins
DWC-PZ21M69T	192.168.150.41	DWC-PZ21M69T	00:0D:F1:21:29:21	255.255.255.0	192.168.150.1	80	Disabled	A5.01.03_20180403	Ping	Click	39day 15hrs 54mins
DWC-PVX16W4	192.168.150.42	DWC-PVX16W4	00:0D:F1:21:5C:AD	255.255.255.0	192.168.150.1	80	Disabled	S2.01.03_20180309	Ping	Click	56day 16hrs 46mins
DWC-PF3M1TR	192.168.150.61	DWC-PF3M1TR	00:0A:61:1A:00:14	255.255.255.0	192.168.150.1	80	Disabled	-	Ping	Click	--
DWC-PVF9M2TR	192.168.150.62	DWC-PVF9M2TR	00:0A:61:1A:26:E7	255.255.255.0	192.168.150.1	80	Disabled	-	Ping	Click	--
DWC-MF4WH	192.168.150.63	DWC-MF4WH	00:0D:F1:20:F8:60	255.255.255.0	192.168.150.1	80	Disabled	A2.01.02_20180619	Ping	Click	28day 14hrs 0mins

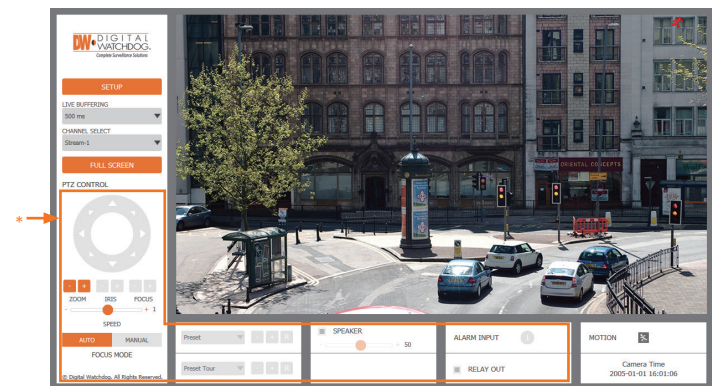
Network Setup

1. To install the DW® IP Finder™, go to <http://www.digital-watchdog.com>
2. Enter “DW® IP Finder” on the search box at the top of the page.
3. Go to the “Software” tab on the DW® IP Finder™ page to download the installation file.
4. Follow the installation to install the DW® IP Finder™. Open the DW® IP Finder™ and click ‘Scan Devices’. It will scan the selected network for all supported devices and list the results in the table. During the scan, the DW® logo will turn gray.
5. When connecting to the camera for the first time, a password must be set. To set up a password for your new camera:
 - a. Check the box next to your new camera from the IP Finder's search results. You can select multiple cameras.
 - b. Click “Bulk Password Assign” on the left.
 - c. In the pop-up window, enter admin/ admin in the current username and password fields. Enter a new username and password to the right.
 - d. Press “change” to apply all changes.
6. Select a camera from the list by double-clicking on the camera's image or clicking on the ‘Click’ button under the IP Conf. column. The pop-up window will show the camera's current network settings, allowing admin users to adjust the settings as needed.
7. To access the camera's web page, go to the IP Config page and click on the ‘View Camera Website’.
8. To save the changes made to the camera's setting, input the username and password of the camera and click Apply.

i 'Port forwarding' has to be set in your network's router for external access to the camera.



STEP 7 – WEB VIEWER

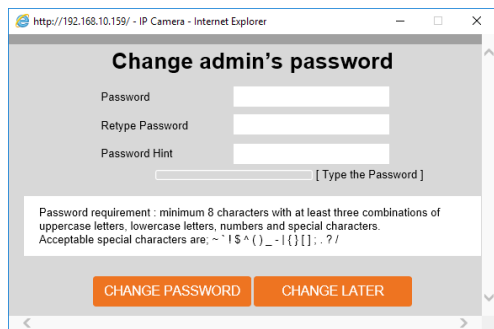


The GUI display may differ by camera models.

Once the camera's network settings have been setup properly, you can access the camera's web viewer using the DW® IP Finder™.

To open the camera's web viewer:

1. Find the camera using the DW® IP Finder™.
2. Double-click on the camera's view in the results table.
3. Press the ‘View Camera Website’. The camera's web viewer will open up in your default web browser.
4. Enter the camera's username and password you setup in the DW® IP Finder™. If you did not setup a new username and password via the DW® IP Finder™, you will not be able to view video from the camera. A message will direct you to setup a new password for the camera to view video.



5. When accessing the camera for the first time, install the VLC player for web files to view video from the camera.

NOTE: 32bit version of the VLC player must be installed. If you are using a 64bit system, uninstall the previous 64bit version and reinstall using the 32bit version.

NOTE: Some menu options may not be available based on the camera model. See the full manual for more information.

Standard SCC Requirements and Guidance - Product Certification Body Accreditation Program Edition/ Revision Date 2016-04-06

Clause/Par. Reference and Construction Requirement	Comply			Comments/Measurements	Inst. ID No.
	Yes	No	N/A		
9.2.3 CBs shall include dual language safety labeling within their product certification requirements, if so required by the standard or by the authority having jurisdiction.					
The manufacturer has confirmed they have the ability to include English and French safety labeling exactly as specified in the product standard; or, if NOT specified in the product standard, the ability to include English and French safety labelling consisting of markings associated with the signal words DANGER, WARNING, and CAUTION when required.	X			The ability of the manufacturer to include these markings was verified by either (1) visual inspection of the markings on the actual product or (2) draft of labels that will be applied to the product or (3) written confirmation from the customer of the markings that will appear on the product. If the product standard provides the exact translation, the evidence must match the exact translation. If the product standard does NOT provide the exact translation, the evidence must simply include both the English and French text (no verification of translation is required).	N/A

Clause/Par. Reference and Construction Requirement	Comply			Comments/Measurements	Inst. ID No.
	Yes	No	N/A		
Manufacturer has a method to manage distribution of products, IF all products with the Canadian certification mark are NOT going to include the dual language.	X			Evaluation staff are to only verify that the manufacturer has a method to control distribution. Evaluation staff do not have to record the method of control nor are the evaluation staff expected to verify the effectiveness of the method of control. This requirement to verify that a method exists will be noted in the FUS Procedure. The UL Field Engineer will verify the method during surveillance. If the manufacturer is going to include the dual language on all products with the Canadian certification mark, then this item is N/A; no further action required.	N/A

SPECIFICATION	CUSTOMER:	C-PRO		
	CUSTOMER P/N:	CP1312-B	REV:	A
	BOB TECH P/N:		REV:	A

1. Dimension diagram (UNIT:mm)

13.0±0.5

13.0±0.5

#10 #6

#1 #5

CORE TAPE: Yellow

16.0±0.2

18.0±0.2

12.0±0.2

0.45

MARK

2.5X4

0.7

2.5

MARKING : 1차측 CP1312-B

2. CONSTRUCTION

1

5

2

4

W1+W4

W3

W2

10

6

" ● " Mean Start

3. INTERNAL CONSTRUCTION

Mean barrier tape

Mean mylar tape

Mean margin tape

1-5PIN

6-10PIN

W4

W3

W2

W1

BOBBIN

CORE(gap)

CORE(gap)

SPECIFICATION					CUSTOMER:	C-PRO		
					CUSTOMER P/N:	CP1312-B	REV:	A
					BOB TECH P/N:		REV:	A
4. Winding parameters								
No	S-F	wire or other	turns	barrier tape	winding way	wind tape	turns	remark
W1	1--5	2UEW 0.30φ	22		CLOSE	25u*8.0mm(Y)	2	
W2	10--6	2UEW 0.30*3#	13		CLOSE	25u*8.0mm(Y)	2	
W3	2--4	2UEW 0.20φ	15		CLOSE	25u*8.0mm(Y)	2	
W4	1--5	2UEW 0.30φ	22		CLOSE	25u*8.0mm(Y)	2	
CORE wrapping tape: 25u*6.5mm(Y), 3TS								
5. Electrical Characteristics(AT 25℃)								
NO.	ITEM	TERMINAL		SPECIFICATION		REMARK		
1	INDUCTANCE	1--5		48uH±10%		LCR-3302 1KHz ,1V		
3	INSULATION RESISTANCE	P COIL---S COIL		100MΩ MIN		AN9632W DC500V		
		P、SCOIL---CORE						
4	WITHSTANDING VOLTAGE	P COIL---S COIL		AC 1.0KV/SEC/5mA		AN9632W		
		P、SCOIL---CORE		AC 1.0KV/SEC/5mA				
6. Materials list								
NO.	COMPONENT	MATERIALS	MANUFACTURERS			REMARKS		
1	CORE	P4	ACME ELECTRONICS CORPORATION			N/A		
2	BOBBIN	PM9630	SUMITOMO BAKELITE CO LTD			E41429		
3	WIRE	UEW	SHANDONG SAINT ELECTRIC CO., LTD			E194410		
4	INSULATION TAPE	CT	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO., LTD			E165111		
6	VARNISH	319-5F	JIANGYIN CITY DENG FENG ELECTRICAL MATERIAL CO., LTD			E239866		

BOB TECH

APPROVAL SHEET

CUSTOMER : C-PRO Co., LTD.

PART NAME : TRANSFORMER

PART NO. : CP1312-B

APPROVAL	REFERENCE

DATE : 2012. 11. 12.



S.H.E CO.

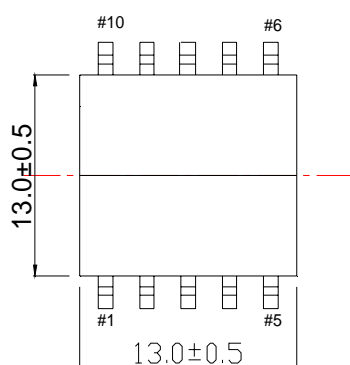
HEAD-OFFICE : D/255, Suwon GongGu Town Bldg, 23-26, Pyeong-Dong,
Gwonseon-Gu, Suwon-Si, Gyeonggi-Do, Korea
TEL : 82-70-4253-9157
FAX : 82-31-297-9257

SPECIFICATION		SHEET NO.	2 OF 5
		DATE	2012. 11. 12
PART NO.	CP1312-B	DWG NO.	

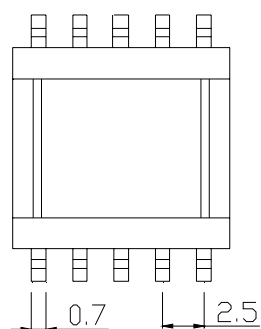
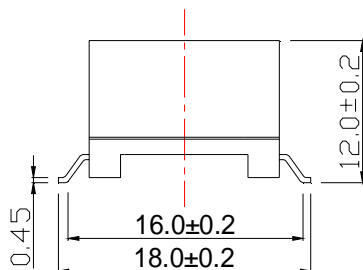
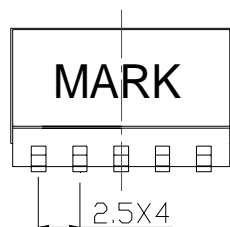
1. GENERAL SPECIFICATION

This specification is applied to **SMD TRANSFORMER** for use in electronic appliances

2. DIMENSION (UNIT : m/m)



CORE TAPE: Yellow

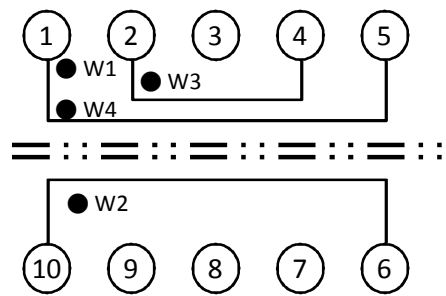


MARKING : CP1312-B

NO	REVISION	DATE	CHECK	DRAWN	CHECKED	APPROVED
1				J. Y. NA		E. A. LEE
2						
3						
4						

SPECIFICATION		SHEET NO.	3 OF 5
		DATE	2012. 11. 12
PART NO.	CP1312-B	DWG NO.	

3. SCHEMITIC DIAGRAM



4. Electrical Characteristics

- * 저장온도 : -40℃ to +85℃
- * 동작온도 : -40℃ to +85℃

NO	ITEM	TERMINAL	SPEC.	REMARK
1	INDUCTANCE 1KHz 1.0 V SERIES	1 - 5	47uH ±15%	3260B Precision Magnetics Analyzer (Wayne Kerr)
2	HI-POT TEST AC 5mA /1 Min	PRI - SEC PRI-CORE SEC-CORE	AC 1.5KV R.M.S AC 1.0KV R.M.S AC 1.0KV R.M.S	KIKUSUI 860A
3	Insulation Resistance	COIL - COIL COIL - CORE	100MΩ Min at DC 500V	KIKUSUI 860A

NO	REVISION	DATE	CHECK	DRAWN	CHECKED	APPROVED
1				J.Y. NA		E.A LEE
2						
3						
4						

SPECIFICATION		SHEET NO.	4 OF 5
		DATE	2012. 11. 12
PART NO.	CP1312-B	DWG NO.	

5. Reliability Test and Mechanical Test

5.1 Heat and Humidity Test

Electrical characteristics have to satisfy and no damage after following test.

TEST	CONDITION	
HIGH TEMPERATURE, HUMIDITY TEST	40±2℃, 90~95% RH 48 hours	
TEMPERATURE CYCLING TEST	-40±2℃ 30min	5 Cycle
	25±2℃ 30min	
	85±2℃ 30min	
	25±2℃ 30min	

After to test in room temperature for 1 hour inductance deviation within ±5%.

5.2 Vibration Test

Apperance and structure shall not damaged on following test.

Inductance deviation within 5%.

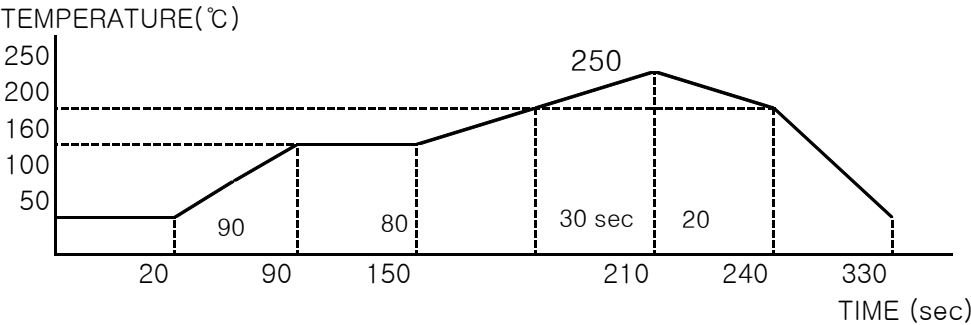
FREQUENCY	10Hz to 55Hz to 10Hz	STANDARD IEC 68-2-6
AMPLITUDE	1.5 min	
TIME	1 hours / axis	

5.3 Reflow Test

Electrical characteristics have to satisfy and no damage after following test.

TEST	250±2℃ 3min
------	-------------

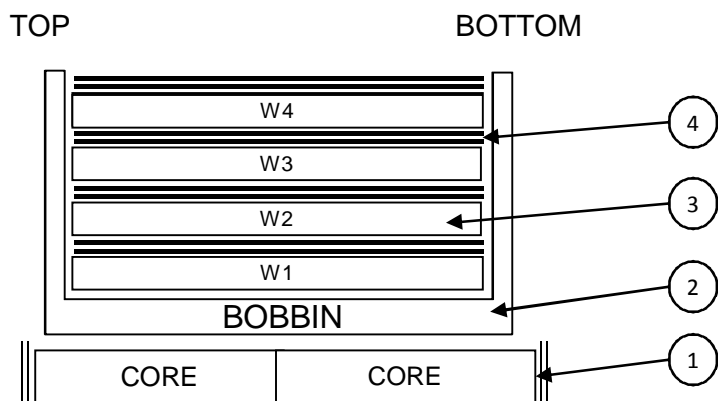
* REFLOW 공정도



NO	REVISION	DATE	CHECK	DRAWN	CHECKED	APPROVED
1				J.Y. NA		E.A LEE
2						
3						
4						

SPECIFICATION		SHEET NO.	5 OF 5
		DATE	2012. 11. 12
PART NO.	CP1312-B	DWG NO.	

6. Winding Specification



NO	WINDING NO.	WINDING	TURNS	PIN NO.	INSULATION
1	W1	UEW 0.30mm	22Ts	1 - 5	PE Tape 0.025T 2Ts
2	W2	UEW 0.30mm X 3	13Ts	10 - 6	PE Tape 0.025T 2Ts
3	W3	UEW 0.20mm	15Ts	2 - 4	PE Tape 0.025T 2Ts
4	W4	UEW 0.30mm	22Ts	1 - 5	PE Tape 0.025T 2Ts
CORE FIXING TAPE					PE Tape 0.025T 2Ts

7. Material List

NO	NAME	MATERIAL	SUPPLIER	UL NO.
1	CORE	FERRITE EP13 PL-7 Or EQV	SAM HWAELECTRONICS CO., LTD OR EQV	
2	BOBBIN	EP13 SMD-10P LCP E4008 OR PHENOLIC	CHANG CHUN PLASTICS CO., LTD. OR EQV	E59481
3	WIRE	UEW 0.20mm UEW 0.30mm	ZHEJIANG WUGU INDUSTRIES CO., LTD. OR EQV	E336659
4	TAPE	POLYESTER TAPE 0.025t X 7.5mm, 0.025t 9.0mm	WEIHAI KANGLI TAPE CO., LTD. OR EQV	E475896
5	VANISH	DVB-2180T ,SR-337 OR EQV	SUZHOU TAIHU ELECTRIC ADVANCED MATERIAL CO.,LTD. OR EQV	E228349

NO	REVISION	DATE	CHECK	DRAWN	CHECKED	APPROVED
1				J. H. N. A		E. A. LEE
2						
3						
4						

PRODUCT LABEL

MODEL No. DWC-MV45WiATW
INPUT: 12V DC, 0.69A/PoE(802.3af)0.22 A

S/N. 1904300001
DW CPROVN Rainproof IP68
MADE IN VIETNAM  **US LISTED**
I.T.E E507366



30mm

CAUTION

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

12mm

Risk Group 1

WARNING IR emitted from this product.
Do not stare at operating lamp

Product tested against IEC62471







