

UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements)
Certification Type:	Listing
CCN:	AZOT, AZOT7 (Audio/video, Information and Communication Technology Equipment)
Complementary CCN:	N/A
Product:	Network Camera
Model:	WV-S65340-Z4, WV-S65340-Z2
Rating:	1) 24 V~, 50/60Hz, 3.4A 2) PoE++ 54Vdc, 940mA 3) PoE+ 54Vdc, 470mA
Applicant Name and Address:	I-PRO CO., LTD. 7-9-66 HAKOZAKI HIGASHI-KU FUKUOKA-SHI FUKUOKA 812-0053 JAPAN

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: Kenshi Shimomura / Project
Handler

Reviewed By: Tadao Nakayama / 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

This product is a Network Camera for use in an outdoor environment.

This equipment is supplied from the External Power Supply.

External Power Supply : That External Power Supply itself is not evaluated in this report.

Model Differences

Refer to Enclosure Id: 07-01 for details of model differences.

WV-S65340-Z4 was used for test purposes and is considered representative of the entire series.

Test Item Particulars

Product group	end product
Classification of use by	Ordinary person Instructed person Skilled person
Supply Connection	not mains connected: ES1
Supply tolerance	None
Supply connection – type	External Power Supply
Considered current rating of protective device	N/A
Equipment mobility	stationary wall/ceiling-mounted
Over voltage category (OVC)	OVC II
Class of equipment	Class III
Special installation location	N/A
Pollution degree (PD)	PD 2
Manufacturer's specified T _{ma} (°C)	60
IP protection class	IP 66 / 67
Power systems	not AC mains
Altitude during operation (m)	2000 m or less
Altitude of test laboratory (m)	Approximately 10 to 20 m
Mass of equipment (kg)	4.3kg (Model WV-S65340-Z4)4.2kg (Model WV-S65340-Z2)

Additional Information

Maximum normal load is continuous recording.

Additional Standards

The product fulfills the requirements of: 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)

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)

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
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BD1.2	Earthing Continuity Test Exemptions – This test is not required for the following models:					
	All models					
BD1.3	Electric Strength Test Exemptions – This test is not required for the following models:					
	All models					
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
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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
AC Power Cable Connector	Molex Inc.	5559	AC/DC 600V, 9A	ECBT2	UL	
AC Power Cable	Interchangeable	Style 2464	300V, 20AWG, 80°C, VW-1	AVLV2	UL	
Network Cable (PoE Input Cable)	Interchangeable	Style 2464	300V, 26AWG, 80°C, VW-1	AVLV2	UL	
Heater Cable	Interchangeable	Style 3385	300V, 24AWG, 105°C, VW-1	AVLV2	UL	
Connector (CN501) (at AC 24V input)	Japan Solderless Terminal Mfg. Co., Ltd.	Series VH(B2P3- VH(LF)(SN))	AC/DC 250V, 10A	ECBT2	UL	
Alternate	Interchangeable	Interchangeable	AC/DC 250V, min. 10A	ECBT2	UL	
Connector (CN504) (at PoE Input)	Japan Solderless Terminal Mfg. Co., Ltd.	Series GH(BM09B- GHS-TBT(LF)(SN))	AC/DC 100V, 1A	ECBT2	UL	
Alternate	Interchangeable	Interchangeable	AC/DC 100V, min. 1A	ECBT2	UL	
Fan Motor	Aavid (Shanghai) Systems Co. Ltd. (TRANYOUNG TECHNOLOGY CORP.)	B5015M12B ND1	12 V, 0.15 A, 6200rpm	--	(Tested in equipment)	
Alternate	Dongguan Protechnic Electric Co., Ltd. (Protechnic Electric Co., Ltd.)	MBA5112XB-O15	DC 12V, 0.21A, 6200rpm	--	(Tested in equipment)	
Zoom Lens Unit for WV-S65340-Z4	Tamron Co., Ltd.	DF033N0000	Constructed with Focus Motor x 1pcs & LENS Zoom Motor x 3pcs	--	(Tested in equipment)	
Zoom Lens Unit for WV-S65340-Z2	Tamron Co., Ltd.	DF034N0000	Constructed with Focus Motor x 1pcs & LENS Zoom Motor x 2pcs	--	(Tested in equipment)	

Pan Motor for WV-S65340-Z4	Shinano Kenshi Co., Ltd.	STH-36C0046	(Stepping motor)DC 3.2V, 6.4ohm/phase	--	(Tested in equipment)	
Pan Motor for WV-S65340-Z2	MinebeaMitsumi Inc.	PM35S-N48-PAD8	(Stepping motor)DC 10.5V, 9ohm/phase	--	(Tested in equipment)	
Tilt Motor	MinebeaMitsumi Inc.	PM25S-048-PAE0	(Stepping motor)DC 13V, 15ohm/phase	--	(Tested in equipment)	
Eyelid Motor for WV-S65340-Z4	Nidec Copal Corp.	LPD10G-097-01	(Stepping motor)DC 5V, 20ohm/phase	--	(Tested in equipment)	
Heater (5.6W)	Shinwa Rules Co., Ltd.	43884	DC 10.5V, 5.6W, 19.6ohm, Operating temperature (max): 200°C	--	(Tested in equipment)	
Heater (19W)	Shinwa Rules Co., Ltd.	45652	DC 10.5V, 19W, 5.8ohm, Operating temperature (max): 200°C	--	(Tested in equipment)	
Thermistor (CF401)	MURATA MFG CO., LTD.	NCU15XH103F60R C	125°C	--	(Tested in equipment)	
Lithium Battery (B501)	Panasonic Corp.	BR-1225	3.0V, 48mAh, Maximum Abnormal Charging Current: 3.0mA	BBCV2	UL	
Alternate	POWER GLORY BATTERY TECH (HK) CO., LTD.	BR1225	3.0V, 48mAh, Maximum Abnormal Charging Current: 10mA	BBCV2	UL	
PCBs	Interchangeable	Interchangeable	Minimum V-1, Minimum 130°C	ZPMV2	UL	
Flexible PCBs	Interchangeable	Interchangeable	Minimum V-1, Minimum 80°C	ZPXK2	UL	
Enclosure (Outer) (Decorative): Sunshield (SD), Under Sunshield,	Chi Mei Corp.	PC-540	V-0, minimum 1.5mm thick	QMFZ2	UL	

Cable Case, SD Slot Cover						
Alternate	Interchangeable	Interchangeable	Minimum HB, minimum 1.5mm thick	QMFZ2	UL	
Enclosure (Internal) (elec/fire) (outdoor)	Interchangeable	ADC12	Aluminum Die-cast, minimum 1.0mm thick	--	(Tested in equipment)	
Enclosure (elec) (outdoor): Dome Cover, Dome Ring, Housing	Mitsubishi Engineering-Plastics Corp.	H-3000V+(f1)	V-2, minimum 0.38mm thick	QMFZ2	UL	
Alternate	Mitsubishi Engineering-Plastics Corp.	S-2000V+(f1)	V-2, minimum 0.38mm thick	QMFZ2	UL	
Lens Cover (front), Lens Cover (rear) for WV-S65340-Z4 (Decorative)	Teijin Chemicals Plastic Compounds Shanghai Ltd.	L-1225L	V-2, minimum 0.4mm thick	QMFZ2	UL	
Alternate	Interchangeable	Interchangeable	Minimum HB, minimum 1.0mm thick	QMFZ2	UL	
Lens Cover (2 pieces) for WV-S65340-Z2 (Decorative)	Chang Chun Plastics Co., Ltd.	4115	V-0, minimum 0.75mm thick	QMFZ2	UL	
Alternate	Interchangeable	Interchangeable	Minimum HB, minimum 1.0mm thick	QMFZ2	UL	
Inner Cover	Chang Chun Plastics Co., Ltd.	4115	V-0, minimum 0.75mm thick	QMFZ2	UL	
Alternate	Interchangeable	Interchangeable	Minimum HB, minimum 1.0mm thick	QMFZ2	UL	
Gaskets for Outdoor Enclosure	--	--	See below.	--	--	
Dome Packing	Dow Toray Co., Ltd.	RBB-6630-30	SI, Minimum HB	QMFZ2	UL	

Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856(Hardness: 30)	Minimum 0.6mm thick, HB	QMFZ2	UL	
SD Slot Packing	Dow Toray Co., Ltd.	RBB-6650-50	SI, Minimum HB	QMFZ2	UL	
Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856(Hardness: 50)	Minimum 0.6mm thick, HB	QMFZ2	UL	
Cable Case Packing	Dow Toray Co., Ltd.	RBB-6630-30	SI, Minimum HB	QMFZ2	UL	
Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856(Hardness: 30)	Minimum 0.6mm thick, HB	QMFZ2	UL	
Seal Packing(Dehumidifying element)	Dow Toray Co., Ltd.	SH851U	SI, Minimum HB	QMFZ2	UL	
Cable Bushing (Audio Input Cable)	Dow Toray Co., Ltd.	SH-502U-A/B	SI, Minimum HB	QMFZ2	UL	
Alternate	Dow Toray Co., Ltd.	RBB-6640-40	SI, Minimum HB	QMFZ2	UL	
Alternate	Wynca Tinyo Silicone Co., Ltd.	TY2961	SI, Minimum HB	QMFZ2	UL	
Alternate	Momentive Performance Materials Japan LLC	TSE2183U	SI, Minimum HB	QMFZ2	UL	
Alternate	Shin-Etsu Chemical Co., Ltd.	KE-5620U	SI, Minimum HB	QMFZ2	UL	
Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856(Hardness: 40)	Minimum 0.6mm thick, HB	QMFZ2	UL	
Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856(Hardness: 30)	Minimum 0.6mm thick, HB	QMFZ2	UL	
Cable Bushing (RJ45 Cable)	Wynca Tinyo Silicone Co., Ltd.	TY2961	SI, Minimum HB	QMFZ2	UL	
Alternate	Dow Toray Co., Ltd.	SH-502U-A/B	SI, Minimum HB	QMFZ2	UL	

Alternate	Momentive Performance Materials Japan LLC	TSE2183U	SI, Minimum HB	QMFZ2	UL	
Alternate	Shin-Etsu Chemical Co., Ltd.	KE-5620U	SI, Minimum HB	QMFZ2	UL	
Alternate	Dow Toray Co., Ltd.	RBB-6640-40	SI, Minimum HB	QMFZ2	UL	
Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856(Hardness: 40)	Minimum 0.6mm thick, HB	QMFZ2	UL	
Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856(Hardness: 30)	Minimum 0.6mm thick, HB	QMFZ2	UL	
Cable Bushing (24V Input Cable)	Momentive Performance Materials Japan LLC	TSE2183U	SI, Minimum HB	QMFZ2	UL	
Alternate	Dow Toray Co., Ltd.	SH-502U-A/B	SI, Minimum HB	QMFZ2	UL	
Alternate	Wynca Tinyo Silicone Co., Ltd.	TY2961	SI, Minimum HB	QMFZ2	UL	
Alternate	Shin-Etsu Chemical Co., Ltd.	KE-5620U	SI, Minimum HB	QMFZ2	UL	
Alternate	Dow Toray Co., Ltd..	RBB-6640-40	SI, Minimum HB	QMFZ2	UL	
Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856 (Hardness: 40)	Minimum 0.6mm thick, HB	QMFZ2	UL	
Alternate	WYNCA TINYO SILICONE CO., LTD.	TY856(Hardness: 30)	Minimum 0.6mm thick, HB	QMFZ2	UL	

Enclosures

Type	Supplement Id	Description
Photographs	03-01	Overall view_1
Photographs	03-02	Overall view_2
Photographs	03-03	Overall view_3
Photographs	03-04	Internal view
Photographs	03-05	PWB_1
Photographs	03-06	PWB_2
Schematics + PWB	05-01	Schematics for RTC circuits
Miscellaneous	07-01	Model Differences
Miscellaneous	07-02	Marking Plate

Description of Differences

Item \ Model	Basic model	Similar model
Item	WV-S65340-Z4	WV-S65340-Z2
Mass	Approx. 4.3kg	Approx. 4.2kg
Optical zoom factor	X40	X21

i-PRO

FC



US LISTED

I.T.E. E521573

Network Camera
ネットワークカメラ

Model No. WV-S65340-Z4

POWER 24 V ~ 50/60 Hz 3.4 A

PoE++ 54 V = 940 mA (Class6)

PoE+ 54 V = 470 mA (Class4)

i-PRO Co., Ltd.

Engineered in Japan

Made in China



TYPE 4X
ENCLOSURE



IP66
IP67



SER.NO.

SER.NO.

i-PRO

FC



US LISTED

I.T.E. E521573

Network Camera

ネットワークカメラ

Model No. WV-S65340-Z2

POWER 24 V ~ 50/60 Hz 3.4 A

PoE++ 54 V = 940 mA (Class6)

PoE+ 54 V = 470 mA (Class4)

i-PRO Co., Ltd.

Engineered in Japan

Made in China



TYPE 4X
ENCLOSURE



IP66
IP67



SER.NO.

SER.NO.













【温度SW】

【RTC】

