

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20151110-E140407  
**Report Reference** E140407-A392-UL  
**Issue Date** 2015-NOVEMBER-10

**Issued to:** PANASONIC CORPORATION OF NORTH AMERICA  
PRODUCT SAFETY & COMPLIANCE DEPT  
TWO RIVERFRONT PLAZA  
9TH FL  
NEWARK NJ 07102-5490

**This is to certify that representative samples of** INFORMATION TECHNOLOGY EQUIPMENT INCLUDING ELECTRICAL BUSINESS EQUIPMENT  
Network Camera  
WV-SBV131M, WV-SBV111M

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL 60950-1 AND CAN/CSA C22.2 No. 60950-1-07- (Information Technology Equipment - Safety - Part 1: General Requirements)

**Additional Information:** See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

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## UL TEST REPORT AND PROCEDURE

<b>Standard:</b>	UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
<b>Certification Type:</b>	Listing
<b>CCN:</b>	NWGQ, NWGQ7 (Information Technology Equipment Including Electrical Business Equipment)
<b>Product:</b>	Network Camera
<b>Model:</b>	WV-SBV131M, WV-SBV111M
<b>Rating:</b>	PoE 48Vdc 80mA
<b>Applicant Name and Address:</b>	PANASONIC CORPORATION OF NORTH AMERICA PRODUCT SAFETY & COMPLIANCE DEPT TWO RIVERFRONT PLAZA 9TH FL NEWARK NJ 07102-5490 UNITED STATES

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.

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Prepared by: Yusuke Enokimura

Reviewed by: Ikuro Kinno

**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**

The product tested is a Network Camera for use outdoor specifically intended to be installed to outside body of vehicles (e.g. BUS etc.) So Vibration Test per UL458 conducted to this product.

The Network Camera is supplied from Power over Ethernet (PoE standard IEEE 802.3af).

The equipment is intended for outdoor use and has not been evaluated for use in burglary and theft applications.

Input/Output Connector is intended to connect in indoor location.

**Model Differences**

WV-SBV131M is basic model in this report.

WV-SBV111M is similar to WV-SBV131M except for resolution for image sensor.

**Technical Considerations**

- Equipment mobility : fixed
- Connection to the mains : not directly connected to the mains
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC I
- Mains supply tolerance (%) or absolute mains supply values : No direct connection
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Not classified
- Considered current rating of protective device as part of the building installation (A) : Not connect to mains.
- Pollution degree (PD) : PD 2
- IP protection class : IP66
- Altitude of operation (m) : Up to 2000
- Altitude of test laboratory (m) : less than 1000

- Mass of equipment (kg) : Approx. 750g
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 60°C
- The product was investigated to the following additional standards: CSA/UL60950-22 - Equipment to be Installed Outdoors, IEC 60529, Edition 2.1 + Corr. 1:2003 + Corr. 2:2007 + Corr. 3:2009, UL50E 1st Edition, Revised 2007-09-04, C22.2 No. 94.2 1st Edition., UL458 (Vibration Test)
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- The outdoor equipment/enclosure is: Type 4X Enclosure, IP rated IP66
- The outdoor equipment/enclosure was evaluated for use in an ambient range of: -40°C to 60°C,

#### Additional Information

"The camera is to be connected only to PoE networks without routing to the outside plant when using PoE." So PoE circuits are considered as TNV-3 circuits in outdoor condition with respect to user accessibility concerns.

#### Additional Standards

The product fulfills the requirements of: UL 60950-22 1st Ed. Revised 2011-12-19, CSA C22.2 No. 60950-22-07, IEC 60529, Edition 2.1 + Corr. 1:2003 + Corr. 2:2007 + Corr. 3:2009, UL50E 1st Edition, Revised 2007-09-04, C22.2 No. 94.2 1st Edition.

#### Markings and instructions

Clause Title	Marking or Instruction Details
Power rating - Ratings	Ratings (voltage, frequency/dc, current)
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
Power rating - Model	Model Number
Outdoor Enclosure Marking	"Type 4X Enclosure" on Rating Label
IP Code	"IP66" on Rating Label

#### Special Instructions to UL Representative

Inspect the transformer listed in BD1.1 per AA1.1 - C.  
When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in BD1.1 be conducted at the Component manufacturer.

<b>Production-Line Testing Requirements</b>						
<b><u>Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.</u></b>						
Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
H1601CE	T600	No	Pin# 1, 2, 3, 4, 6, 7 and 8 to Pin# 9, 10, 11, 14, 15 and 16	165 0 V (Required: 100 0V)	--	6 s (Required: 1 s)
PA1133NLT	T601	No	Pin# 1, 2, 3 and 4 to Pin# 5, 6, 7, and 8	150 0 V (Required: 100 0V)	--	6 s (Required: 1 s)
<b><u>Earthing Continuity Test Exemptions - This test is not required for the following models:</u></b>						
All models						
<b><u>Electric Strength Test Exemptions - This test is not required for the following models:</u></b>						
All models						
<b><u>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:</u></b>						
N/A						
<b><u>Sample and Test Specifics for Follow-Up Tests at UL</u></b>						
Model	Component	Material	Test	Sample(s)	Test Specifics	
N/A						