

# TEST REPORT

Report No.:

HC80044/2010

Page:

of

Date:

August 20, 2010

7

DYNACOLOR, INC. NO. 116, JOU TZ STREET, NEIHU, TAIPEI, TAIWAN, R.O.C.

The following merchandise was submitted and identified by the vendor as:

Product Description:

Network DynaHawk Compact IP Dome Camera Case

Style/ Item No.:

NH100/No.1

Quantity:

Total 1 piece

Testing Period:

Aug. 13, 2010 to Aug. 16, 2010

Note:

(Client's declaration) The NH102, NV102, NA102, NH103, NV103 and

NA103 used the identical enclosure

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Required:

(According to client's test specification, please see following sheets in detail.)

Test for Degrees of Protection Provided by Enclosures

IP Code	IP66
First characteristic numeral	Degrees of protection against access to hazardous parts and against solid foreign objects
Second characteristic numeral	Degrees of protection against ingress of water

Test Results: - PLEASE SEE ATTACHED SHEETS -

Signed for and on behalf of SGS TAIWAN Ltd.

Terence Hsieh Manager - Operation

Member of SGS Group

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TWA 2867277



# TEST REPORT

Report No.: HC80044/2010

7

of

2 Page:

# Test for Degrees of Protection Provided by Enclosures:

### Test Equipment:

Name	Brand	Model	Serial No.
1.0 mm Test Wire Probe	E.D.&D.	TRP-02	B0050180
Digital Force Gauge	ALGOL	HF-50	HF-106764
Dust Tester	T-MACHINE	TMJ-9723C	T-23-050411
IPX6 Water Jet Hose Nozzle Set	PTL	P03.28	5040045

#### Lab Environmental Conditions:

Ambient temperature:

25±3℃

Relative humidity:

55±20%RH

### Test Method/ Specification:

Test method:

According to IEC 60529 Edition 2.1: 2001-02--IP66

#### 1. Test for protection against access to hazardous parts:

Test method:

IEC 60529 Edition 2.1: 2001-02--IP6X

The test wire with 1.0 mm in diameter and 100 mm long is pushed against or inserted through any openings of the enclosure with the force specified in Table 6 in IEC 60529 Edition 2.1: 2001-02. Examine whether the test wire

touches the hazardous live parts inside the enclosure or not.

Test force:

1 N±10 %

# 2. Test for protection against solid foreign objects:

Test method:

IEC 60529 Edition 2.1: 2001-02--IP6X (Dust test)

Type of dust:

Talcum powder

The amount of dust:

2 kg

The chamber size:

 $1 \text{ m}^3$ 

The maximum depression: -20 mbar

Test duration:

8 hours

Examine the protection against ingress of dust of specimen(s) after this test.

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TWA 2 8 6 7 2 7 8





### TEST REPORT

Report No.: HC80044/2010

Page:

### Test Method/ Specification--Continued:

# 3. Test for protection against water:

Test method:

IEC 60529 Edition 2.1: 2001-02--IPX6

Test means:

Spraying the enclosure from all practicable directions with a stream of water

from a standard test nozzle as specified in test standard.

Internal diameter

of the nozzle:

12.5 mm

Delivery rate:

100 ε/min ±5%

Distance from nozzle

to enclosure surface:

between 2.5 m and 3 m

Core of the substantial

stream:

circle of approximately 120 mm diameter at 2.5 m distance from nozzle

Test duration:

3 minutes

Examine the protection against ingress water of specimen(s) after this test.





# TEST REPORT

Report No.: HC80044/2010

7 of Page:

Specimen:

Style/ Item No.:

NH100/No.1

Quantity:

Total 1 piece

### Test Result:

A. Degrees of protection against access to hazardous parts and against solid foreign objects (IP6X)

A-1 Test for protection against access to hazardous parts (IP6X)

Test Result		
Check Item		Style/ Item No.
		NH100/ No.1
1	Does the test wire penetrate any openings of the enclosure?	No
2	(followed check item 1) If the test wire penetrates any openings of the enclosure, does the test wire touch any hazardous live parts or any hazardous mechanical parts?	N/A
3	(followed check item 2) Does adequate clearance be kept between the test wire and hazardous live parts or hazardous mechanical parts?	N/A

Note 1: N/A means "Not Applicable".

Note 2: The check items in this test report for inspecting the degree of protection provided by enclosures are reference to the requirements specified in IEC 60529 Edition 2.1: 2001-02 and in accordance with the acceptance conditions specified by client.

# A-2 Test for protection against solid foreign objects (IP6X)

Test Result	
	Style/ Item No.
Check Item	NH100/ No.1
Does any dust deposit inside the enclosure at the end of the test?	No

Note 1: N/A means "Not Applicable".

Note 2: The check items in this test report for inspecting the degree of protection provided by enclosures are reference to the requirements specified in IEC 60529 Edition 2.1: 2001-02 and in accordance with the acceptance conditions specified by client.

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TWA 2867280 TWA 2867280





# TEST REPORT

Report No.: HC80044/2010

Page:

5

of

### Test Result--Continued:

B. Degree of protection against ingress of water (IPX6)

	Test Result	
Check Item		Style/ Item No.
		NH100/ No.1
1	Does any water enter the enclosure?	No
2	(followed check item 1) If any water has entered, does the water accumulate near the cable end or live parts?	N/A
2.1	(followed check item 2) Does the water be sufficient to interfere with the correct operation of the equipment or impair safety?	N/A
	(followed check item 2.1) Does the water deposit on insulation parts where it could lead to tracking along the creepage distances?	
2.3	(followed check item 2.2) Does the water reach live parts or windings not designed to operate when wet?	N/A

Note 1: N/A means "Not Applicable".

Note 2: The check items in this test report for inspecting the degree of protection provided by enclosures are reference to the requirements specified in IEC 60529 Edition 2.1: 2001-02 and in accordance with the acceptance conditions specified by client.

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TWA 2 8 6 7 2 8 1



# TEST REPORT

Report No.: HC80044/2010

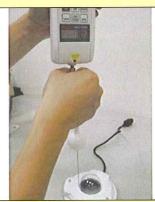
Page:

of

# Test Photos:



1. Appearance of specimen: NH100



Test for protection against access to hazardous parts



Test for protection against access to hazardous parts



Test for protection against solid foreign objects (Dust test)



Test for protection against solid foreign objects (Dust test)

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TWA 2867282



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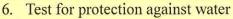
Report No.: HC80044/2010

Page:

of 7

Test Photos--Continued:







Test for protection against water

The End of Test Report — — —

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