



Reliability Laboratory

TEST REPORT

Report No.: HC90090A/2009

Page: 1 of 5

Date: October 2, 2009

UNICABLE CO., LTD.
5F, NO. 111-33, SEC. 4, SAN HO ROAD,
SAN CHUNG CITY, TAIPEI HSIEN,
TAIWAN, R.O.C.

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

Product Description: M12 Series
Style / Item No.: UT-D230/ UT-D170F/ UT-D168M / No.1
Manufacturer/ Vendor: Unicable Co., Ltd.
Country of Origin: Taiwan
Quantity: Total 1 piece
Testing Period: Sep. 24, 2009 to Sep. 25, 2009

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.)

1. Waterproof Test

Test Results: – PLEASE SEE ATTACHED SHEETS –

* HC90090/2009, dated September 30, 2009, is hereby canceled and replaced by HC90090A/2009.

Terence Hsieh
Manager - Operation

1. Waterproof Test:

Test Equipment:

Name	Brand	Model	Serial No.
IPX7/IPX8 Immersion Tank	self-made	SGS-ETR-0201	000001
AC/DC Withstand Voltage/ Insulation Tester	EXTECH	7142	1340019

Lab Environmental Conditions:

Ambient temperature: 25±3°C

Relative humidity: 55±20% RH

Test Method/ Specification:

(1) Waterproof Test

Test method: According to IEC 60529 Edition 2.1:2001-02--IPX8

Test means: Completely immerse the specimen in water in its service position as specified by client.

Test condition: The lowest point of enclosures is located 2000 mm below the surface of the water

Test duration: 24 hours

Test Device: As shown in photo 5, 6

- Examine the protection against ingress water of specimen and perform Dielectric Withstanding Voltage Test after this test.

(2) Dielectric Withstanding Voltage Test

Applied Voltage: 500 V_{AC}

Frequency: 60 Hz

Duration time: 1 minute

Measuring position: As shown in photo 7, 8

Requirement: No flashover, no spark-over, no excess leakage and no break down between the two contacts of all test samples.

TEST REPORT

Report No.: HC90090A/2009

Page: 3 of 5

Specimen:

Style / Item No.: UT-D230/ UT-D170F/ UT-D168M / No.1

Quantity: Total 1 piece

Test Result:





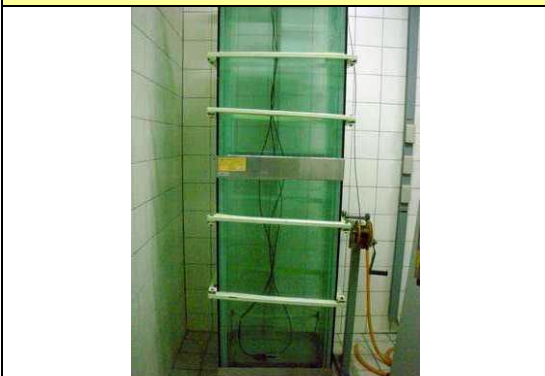

1. Examination of product: (Appearance check)

Check Item	
Style / Item No.	Provide protection against ingress water?
UT-D230/ UT-D170F/ UT-D168M / No.1	Yes

2. Dielectric Withstanding Voltage Test

Test Item	
Style / Item No.	Dielectric Withstanding Voltage Test (500 V_{AC}/ 60 Hz, 1 minute)
UT-D230/ UT-D170F/ UT-D168M / No.1	OK
Note: "OK" means no breakdown (leakage current < 0.5 mA)	

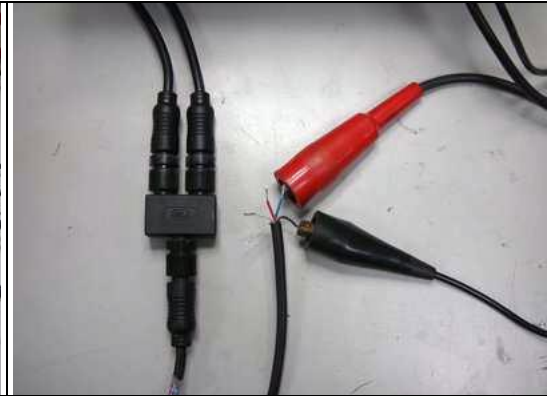
Test Photos:

	
<p>1. Appearance of specimen: UT-D230/ UT-D170F/ UT-D168M</p>	<p>2. Appearance of specimen: UT-D230</p>
	
<p>3. Appearance of specimen: UT-D170F</p>	<p>4. Appearance of specimen: UT-D168M</p>
	
<p>5. Waterproof Test</p>	<p>6. Waterproof Test</p>

Test Photos--Continued:



7. Dielectric Withstanding Voltage Test



8. Dielectric Withstanding Voltage Test

— — — **The End of Test Report** — — —