



# TEST REPORT

**Report No.**..... : WTF13F1209655S  
**Applicant**..... : GlobTek, Inc.  
**Address**..... : 186 Veterans Dr. Northvale NJ 07647 USA  
**Manufacturer**..... : GlobTek (Suzhou) Co., Ltd  
**Address**..... : Building 4, No. 76, Jin Ling East Rd., Suzhou Industrial Park, Suzhou, JiangSu 215021, China  
**Product Name**..... : Power supply  
**Model No**..... : See model list on page 2  
**Ratings**..... : See model list on page 2  
**Standards**..... : IEC60529:1989+A1:1999+A2:2013  
**Test Category**..... : Entrusted Test  
**Test Item**..... : IP42 Test  
**Date of Receipt sample**..... : 2013-11-06  
**Date of Test**..... : 2013-11-06 to 2013-12-12  
**Date of Issue**..... : 2013-12-13  
**Test Report Form No.**..... : WST-60529-31B  
**Test Result**..... : Pass\*

**\*Remarks:**

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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Approved by:



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Qren Yang/Manager

**List of test items:**

No.	Test Items	Requirement + Test	Result
1	IP42 Test	IEC60529:1989+A1:1999+A2:2013	Pass

**Subcontract**

Whether parts of tests for the product have been subcontracted to other labs:

 Yes  No

If Yes, list the related test items and lab information:

Test items: ---

Lab information: --

**Remarks:**

1.All models have the same structure except output voltage and current, please see model list as below.

**2.Model list :**

Model	-X.X scope	Standard model output voltage (Vdc)	Output voltage (Vdc)	Max. Output current (A)	Max output power (W)	Rated input
GTM21097-2003-X.X	0.1-0.3 or blank	3.3	3-3.3	6	20	100-240V~ 50-60Hz
GTM21097-3005-X.X	0.1-1.6 or blank	5	3.4-5	6	30	100-240V~ 50-60Hz
GTM21097-4509-X.X	0.1-0.3 or blank	9	5.1-9	5	45	100-240V~ 50-60Hz
GTM21097-5012-X.X	0.1-3.9 or blank	12	9.1-12	5	50	100-240V~ 50-60Hz
GTM21097-5015-X.X	0.1-2.9 or blank	15	12.1-15	4.13	50	100-240V~ 50-60Hz
GTM21097-5018-X.X	0.1-2.9 or blank	18	15.1-18	3.31	50	100-240V~ 50-60Hz
GTM21097-5024-X.X	0.1-5.9 or blank	24	18.1-24	2.76	50	100-240V~ 50-60Hz
GTM21097-5048-X.X	0.1-23.9 or blank	48	24.1-48	2.07	50	100-240V~ 50-60Hz

M can be "M" or "-" for market identification and not related to safety

-X.X denotes the optional deviation, subtracted or added from standard output voltage in 0.1 volt increments or blank to indicate the no voltage different

3.Full tests have been carried out on model GTM21097-5048



**Test Item :**

Tests for protection against solid foreign objects: IP4X

**Test Method:**

The tests should be carried out under the standard atmospheric condition.

The atmospheric conditions during tests are as follows:

Temperature range: 15 °C to 35 °C. Relative humidity: 25% to 75%.

The test wire of 1.0 mm  $\phi$  insert into any openings of the enclosure with a force of  $1N \pm 10\%$ .

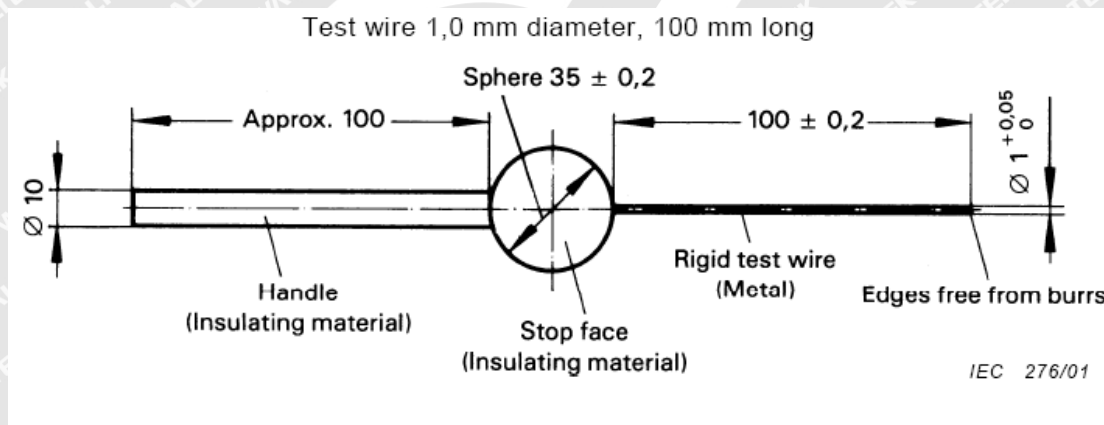
**Acceptance Conditions:**

The protection is satisfactory if adequate clearance is kept between the access probe and hazardous parts.

The protection is satisfactory if the access probe 1.0 mm diameter shall not pass through the any opening.

**Test Result:**

Pass  Fail



# WALTEK



**Test Item:**

Tests for protection against ingress moisture: IPX2

**Test Method:**

The tests should be carried out under the standard atmospheric condition. The atmospheric conditions during tests are as follows:

Temperature range: 15 °C to 35 °C; Relative humidity: 25% to 75%.

The tests are conducted with fresh water. The water temperature should not differ by more than 5 K from the temperature of the specimen under test. If the water temperature is more than 5 K below the temperature of the specimen a pressure balance shall be provided for the enclosure.

The test is made with a device which produces a uniform flow of water drops over the whole area of the enclosure. An example of such a device is shown in figure 3 a). The turntable on which the enclosure is placed has a rotation and the eccentricity (distance between turntable axis and specimen axis) is approximately 100 mm. The turntable on which the enclosure is placed does not turn. The enclosure under test is placed in its normal operating position under the drip box, the base of which is larger than that of the enclosure. Except for enclosures designed for wall or ceiling mounting, the support for the enclosure under test should be smaller than the base of the enclosure. An enclosure normally fixed to a wall or ceiling is fixed in its normal position of use to a wooden board having dimensions which are equal to those of that surface of the enclosure which is in contact with the wall or ceiling when the enclosure is mounted as in normal use.

Water flow rate is  $3 \pm 0.50$  mm/min. The enclosure is tested for 2.5 min in each of four fixed positions of tilt. These positions are 150° on either side of the vertical in two mutually perpendicular planes. The total duration of test is 10 min.

NOTE: When the base of the drip box is smaller than that of the enclosure under test, the latter may be divided into several sections, the area each section being large enough to be covered by the dripping water. The test is continued until the whole area of the enclosure has been sprinkled for the specified time.

**Acceptance Conditions:**

After testing in accordance with the appropriate requirements, the enclosure shall be inspected for ingress of water.

It is the responsibility of the relevant Technical Committee to specify the amount of water which may be allowed to enter the enclosure and the details of a dielectric strength test, if any.

In general, if any water has entered, it shall not:

- be sufficient to interfere with the correct operation of the equipment or impair safety;
- deposit on insulation parts where it could lead to tracking along the creepage distances;
- reach live parts or windings not designed to operate when wet;
- accumulate near the cable end or enter the cable if any.

If the enclosure is provided with drain-holes, it should be proved by inspection that any water which enters does not accumulate and that it drains away without doing any harm to the equipment.

For enclosures without drain-holes, the relevant product standard shall specify the acceptance conditions if water can accumulate to reach live parts.

**Test Result:**

Pass  Fail

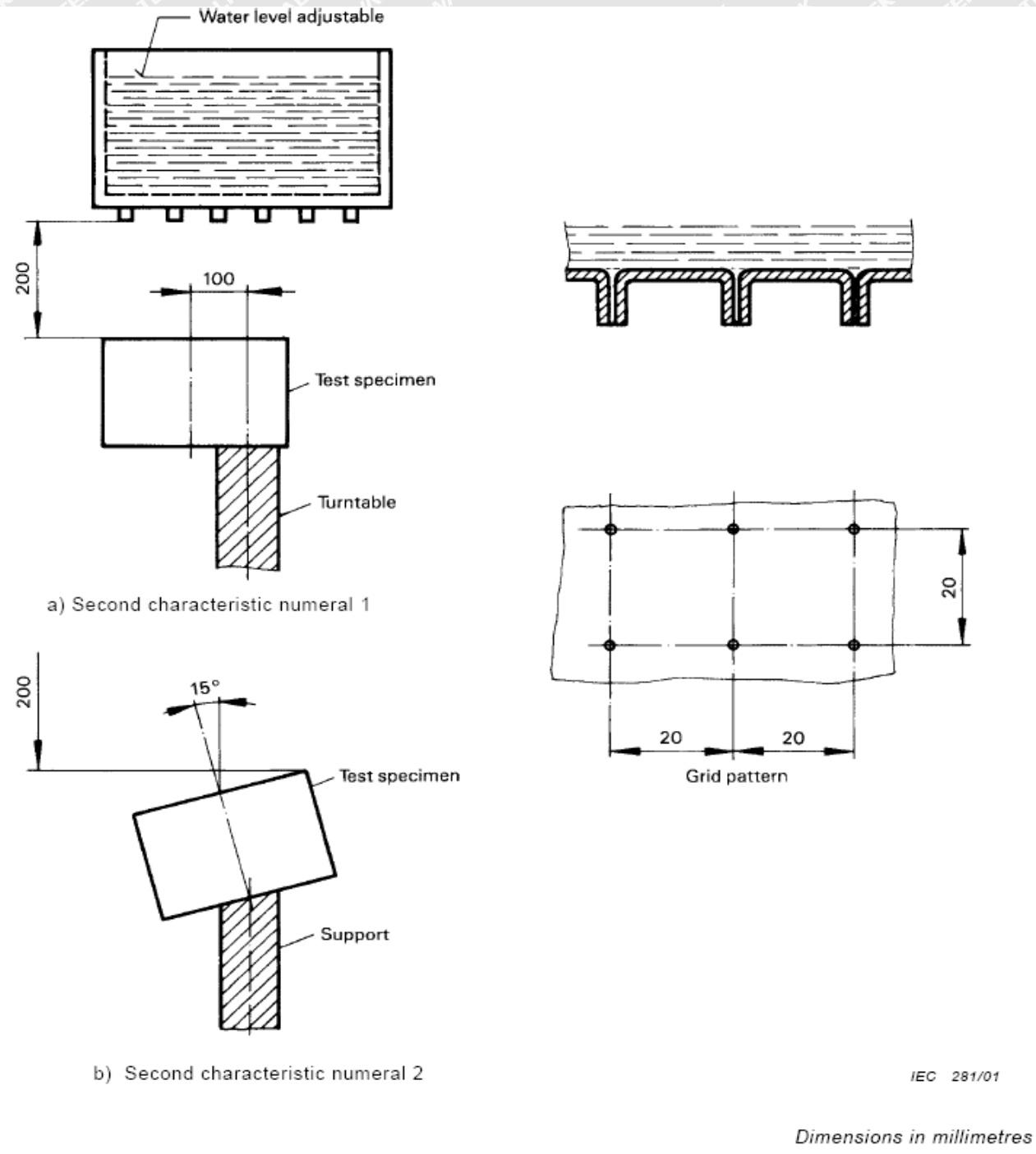


Figure 3 – Test device to verify protection against vertically falling water drops (drip box)



**Photo Documentation :**

**Model: GTM21097-5048**



Photo 1

**Model: GTM21097-5048**



Photo 2



**During the IPX2 test**



Photo 3

**After the IPX2 test**



Photo 4



**After the IPX2 test**

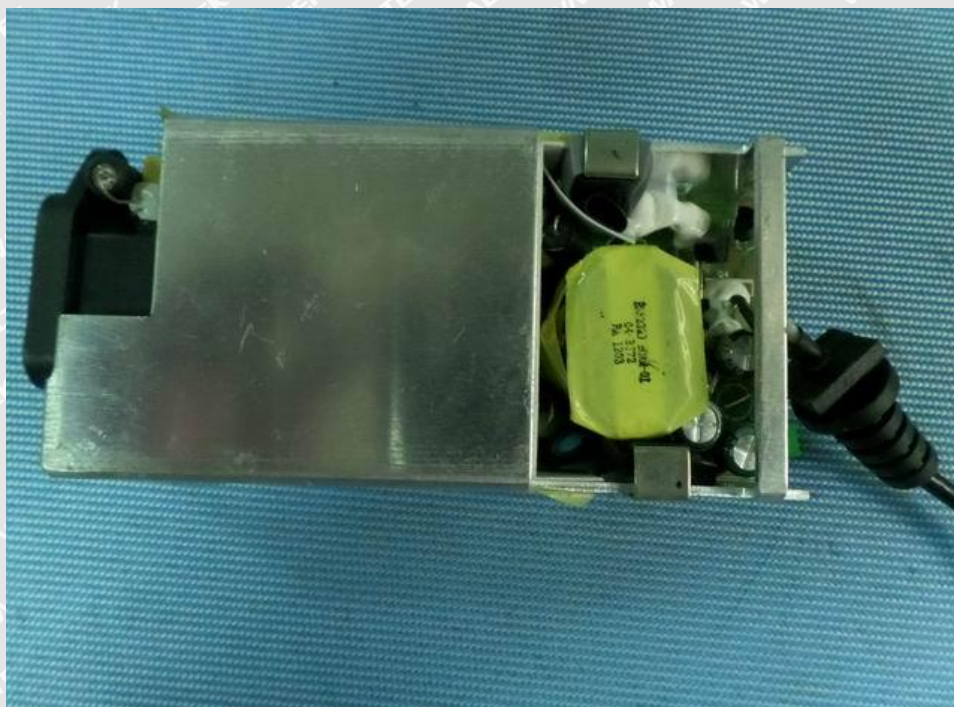


Photo 5

**Model: GTM21097-5048**



Photo 6



**Equipment Used during Test :**

Equipment	Model/Type	Cal. Date
Temperature & Humidity Datalogger	THG312	2013-02-28
Power Meter	QINZHI 8775A	2013-03-04
Dielectric & Insulation Resistance Tester	CHROMA 9012	2013-03-04
Probe	HANYANG FZ-1107-A	2013-03-16
Force Gauge	ALGOL NK-300	2013-03-04
Protection against water test device	HAIYU HY-IPX1-6	2013-03-04

===== End of Test Report =====

**WALTEK**