



# SMART TEAM HOLDINGS LIMITED

## TEST REPORT

|                   |  |
|-------------------|--|
| Prepared For:     | SMART TEAM HOLDINGS LIMITED<br>Flat A01, 5/F, Great Wall Fty Bldg., 11 Cheung Shun St., Lai Chi Kok, Kowloon, HK |
| Product Name:     | UVC STERILIZER & BALANCED ION AIR PURIFIER   |
| Trade Name:       | <b>CSTT</b>  |
| Main Test Model : | Ai202  |
| Prepared By :     | Shenzhen BST Technology Co., Ltd   |
|                   | Building No.23-24, Zhiheng Industrial Park, Guankouer Road, Nantou,Nanshan District,Shenzhen,Guangdong,China     |
| Test Date:        | Aug. 19, 2018 –Aug. 21, 2018   |
| Date of Report :  | Aug. 21, 2018  |
| Report No.:       | BST180811436101SR  |



**IP CODE Report**

**EN 60529**

**Degrees of protection  
provided by enclosures**

|   |   |
|---|---|
| Testing Laboratory Name .....                     | Shenzhen BST Technology Co.,Ltd.  |
| Address .....                                     | Building No.23-24, Ziheng Industrial Park, Guankouer Road, Nantou, Nanshan District, Shenzhen, Guangdong, China                         |
| Testing location .....                            | Shenzhen BST Technology Co.,Ltd.  |
| Applicant's Name .....                            | SMART TEAM HOLDINGS LIMITED   |
| Address .....                                     | Flat A01, 5/F, Great Wall Fty Bldg., 11 Cheung Shun St., Lai Chi Kok, Kowloon, HK   |
| Manufacturer .....                                | SHENZHEN SMART TEAM TECHNOLOGY LIMITED  |
| Address .....                                     | Building A, 3 Floor Xutai Industrial Zone, Long Wo Road, Long Tian Village, Keng Zi Town, Pingshan District, Shenzhen, Guangdong, China |
| Test specification                                | N/A   |
| Standard .....                                    | EN 60529:1991+A1:2000+A2:2013   |
| Procedure deviation .....                         | IPX4  |
| Non-standard test method .....                    | N/A   |
| Test item description .....                       | See page 1  |
| Model and/or type reference .....                 | See page 1  |
| Test case verdicts                                |   |
| Test case does not apply to the test object ....: | N/A   |
| Test item does meet the requirement .....         | P(ass)  |
| Test item does not meet the requirement .....     | F(ail)  |



**General remarks:**

This report shall not be reproduced except in full without the written approval of the testing laboratory.

The test results presented in this report relate only to the item(s) tested.

"(see remark #)" refers to a remark appended to the report.

"(see Annex #)" refers to an annex appended to the report.

Clause numbers between brackets refer to clauses in EN 60529

Throughout this report a comma is used as the decimal separator.

Prepared by :

Lanya Li

Engineer

Reviewer :

Jacky Zhang

Supervisor

Approved & Authorized Signer :

Wang

Manager





| EN 60529  |   |                             |         |
|-----------|---|-----------------------------|---------|
| Cl.       | Requirement – Test  | Result                      | Verdict |
| <b>5</b>  | <b>Degrees of protection against access to hazardous parts and against solid foreign objects indicated by the first characteristic numeral</b>  |                             | N       |
| 5.1       | Protection against access to hazardous parts  |                             | N       |
|           | <b>First characteristic numeral is 4</b><br>--Protected against access to hazardous parts with a wire.<br>The access probe of 1,0 mm shall not penetrate  |                             | N       |
| 5.2       | Protection against access solid foreign objects   |                             | N       |
|           | <b>First characteristic numeral is 5</b><br>--Dust-tight<br>No ingress of dust  |                             | N       |
| <b>6</b>  | <b>Degrees of protection against ingress of water indicated by the second characteristic numeral</b>  |                             | P       |
|           | Second characteristic numeral is 4<br>--Water projected in powerful jets against the enclosure from any direction shall have no harmful effects.  | IPX4<br>No harmful effects. | P       |
| <b>10</b> | <b>Marking</b>  |                             | N       |
|           | The requirements for marking shall be specified in the relevant product standard.<br>Where appropriate, such a standard should also specify the method of marking which is to be used when<br>- one part of an enclosure has a different degree of protection to that of another part of the same enclosure;<br>- the mounting position has an influence on the degree of protection;<br>-the maximum immersion depth and time are indicated. | No marking                  | N       |
| <b>11</b> | <b>General requirements for tests</b>   |                             | P       |



| EN 60529 |  |  |         |
|----------|--|--|---------|
| Cl.      | Requirement – Test   | Result   | Verdict |
| 11.1     | Atmospheric conditions for water or dust<br>Tests:<br>Temperature range: 15°C to 35 °C<br>Relative humidity: 25% to 75%<br>Air pressure:<br>86 kPa to 106 kPa<br>(860 mbar to 1 060 mbar). | Temperature range: 15°C to 35 °C<br>Relative humidity: 25% to 75%<br>Air pressure:<br>86 kPa to 106 kPa<br>(860 mbar to 1 060 mbar). | P       |
| 11.2     | Test samples<br>The tests specified in this standard are type tests.   | Type tests.  | P       |

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|-----------|---|--|---|
| <b>12</b> | <b>Tests for protection against access to hazardous parts indicated by the first characteristic numeral</b>   |  | N |
| 12.1      | Access probes<br>The test wire of 1,0 mm Ø shall not penetrate and adequate clearance shall be kept   |  | N |
| 12.2      | Test conditions<br>For tests on low-voltage equipment, a low-voltage supply (of not less than 40 V and not more than 50 V) in series with a suitable lamp should be connected between the probe and the hazardous parts inside the enclosure. Hazardous live parts covered only with varnish or paint, or protected by oxidation or by a similar process, are covered by a metal foil electrically connected to those parts which are normally live in operation. The signal-circuit method should also be applied to the hazardous moving parts of high-voltage equipment. Internal moving parts may be operated slowly, where this is possible. |  | N |
| 12.3      | Acceptance conditions<br>The protection is satisfactory if adequate clearance is kept between the access probe and hazardous parts.   |  | N |

|           |   |  |   |
|-----------|---|--|---|
| <b>13</b> | <b>Tests for protection against solid foreign objects indicated by the first characteristic numeral</b> |  | N |
|-----------|---|--|---|



| EN 60529      |   |        |         |
|---------------|---|--------|---------|
| Cl.           | Requirement – Test  | Result | Verdict |
| 13.1&<br>13.2 | Test means & Test conditions<br>Test means and the main test conditions are given in Table VII  |        | N       |
| 13.3          | Acceptance conditions for first characteristic numerals 1,2,3,4<br>The protection is satisfactory if the full diameter of the probe specified in Table VII does not pass through any opening.   |        | N       |
| 13.4          | Dust test for first characteristic numerals 5 and 6<br>The test is made using a dust chamber incorporating the basic principles shown in figure 2 whereby the powder circulation pump may be replaced by other means suitable to maintain the talcum powder in suspension in a closed test chamber. The talcum powder used shall be able to pass through a square-meshed sieve the nominal wire diameter of which is 50 um and the nominal width of a gap between wires 75um.the amount of talcum powder to be used is 2 kg per cubic metre of the test chamber volume. It shall not have been used for more than 20 tests. |        | N       |

|           |  |  |   |
|-----------|--|--|---|
| <b>14</b> | <b>Tests for protection against water indicated by the second characteristic numeral</b>   |  | P |
| 14.1      | Test means & Test conditions<br>Test means and the main test conditions are given in Table VIII  |  | P |
| 14.2.7    | Spray equipment swings of 360°C, spray hole diameter is 0.4mm, the water pressure is 1.3 times the normal, the samples were fixed in a predetermined position of the rotating disk, the control device is turned on for testing, run 10 minutes after the end.   | IPX4<br>Run 10 minutes after<br>Unpack the sample with no internal water droplets. | P |
| 14.3      | Acceptance conditions<br>After testing in accordance with the appropriate requirements of 14.2.1 to 14.2.8 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:<br>-be sufficient to interfere with the correct operation of the equipment or impair safety;<br>- deposit on insulation parts where it could lead to tracking along the creepage distances; - reach | No damage<br>water no entered  | P |



|  |  |  |  |
|--|--|--|--|
|  | <p>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.</p> |  |  |
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## **ANNEX A:**

### **Photo-documentation**



Photo 1 IPX4 Test View



Photo 2 After IPX4 View