Environment Friendly

Generating Power with water absorbing for 5~10 seconds.
product application of HaKuYo Water Battery

According to types and using conditions,
The batteries can continuously light on for about 20 days (480 hours)～62 days (1,500 hours)

Disaster Preventioin  •  Disaster Reduction  •  Security Set

Warranty Period: 1 Year
Storage Period: 10 Years (But depending on storage conditions)
Cautions: Keeping in High humidity and water is prohibited.

Advertisement through TV, Radio and Newspaper
Asahi TV 2011, NHK Nagoya TV 2012, TBS TV 2012, Fuji TV 2012, TBS TV 2013,
Sen Tai TV March 2014, TBS Morning Channel, Kansai Radio
NHK TV and Japan Machikato Information Room  September 1st to 2nd
Industry Newspaper Company Daily February 6 and 27, May 12, Japanese Economy MJ June 8,
Asakumo Newspaper Company( in The Ministry of National Defense) July 24,
Tokyo Commercial Industry Conference Newspaper August 20

Samples of Users' Feedback:
1. Mr.Ichikura: Illumination(LED100pcs continuously)
   5 months (3600 hours) continuously lighting on by battery E3P
2. Mr.Niiyama: Water firefly continuously lighting on for 45 days (1080 hours)
3. Mr.Saito: Flashlight(Mid) continuously lighting on for 22 days (528 hours)
Hakuyo Water Battery  PART-1

1. Features
   1) Power to be generated with water injection (For emergency.
   2) Any water can be used, but impurity may shorten the life of battery.
   3) Without water injection, long storage is impossible. (10 Years, but depending on storage conditions)
   4) Once the battery has been used with water injection. It can be used again even after one year, but it takes a little longer time to light
   5) Power can last long time according to the battery size and water injection management. For 400 hours (battery size: 4cm×4cm) ~ 1,500 hours (battery size: 5cm×8cm)
   6) Power can be generated under the temperature -20 ℃.
   7) No restriction for generating site.
   8) The battery can be scrapped separately. Please be attention to the handling regulation of local government.

2. Weakness
   1) The volume of initial water injection and the 2nd time are different. From the 2nd time is only half of the initial. Please be cautious.

3. Comparison with Dry Battery
   1) To environment
      Hakuyo Water Battery: scrapped separately is possible.
      Dry Battery: Industry Waste
   2) About Longivity
      Hakuyo Water Battery: Continuously generating power for 400 hours ~ 1,500 hours (depending on battery
      Dry Battery: Only can continuously generating power for about 72 hours
   3) About Cost
      Hakuyo Water Battery: less than 1/2 of dry battery from comparison power generating and storage time.
      Dry Battery: Only can continuously generating power for about 72 hours.
      It can not generate power with 1 year storage.

4. Hakuyo Water Battery, a product can make the dream of expansion of business come true.

Manufacturer and Distributor: Mishima Denshi Co., Ltd.
YAMASHIRO-NO.3-BLDG.6F 3-6KANDANISHIKI-CHO CHIYODA-KU TOKYO JAPAN
TEL: 03-3293-4791
FAX: 03-3293-4792
E-MAIL: dannoura@w2.dion.ne.jp
http://www.mishima-jp.com

Homepage about Water Battery: http://www.mishima-denshi.jp

Please be noted that the products may be different from the pictures in our catalogue for our constant modificatic
For environment-friendly goods, the plastic case of battery will be gradually changed to aluminum case.
【Battery】

Plastic Case Type

Cylinder Type

AL Pack Type

【Specification】

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<td>T3-C8PO</td>
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<td>T4-A8PO</td>
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<td>41</td>
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<td>T5-C3PO</td>
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<td>EN46-B5P</td>
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<td>EN35-B2P</td>
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<td>EN38-H3P</td>
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<td>AL-D3P0</td>
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<td>AL-E3P0</td>
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<td>AL-E550</td>
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<tr>
<td>AL-G3P350</td>
<td>240</td>
<td>120</td>
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</table>
Disaster Prevention • Disaster Reduction • Security Set
Final Fortress (For Emergency)
(Compostion of the Utility)
1) CH-18LED Illuminator for Emergency 2) Portable Charger for Cell Phone
3) Portable Flashlight 4) Hand-Back Light

CH-18LED Illuminator Set for Emergency
Product NO.: CH-18LED+AL-E3PO×4
Remark: White LED for the illuminator is licensed product. Battery is automatic water absorbing type and exchangable.

(Instructions for use)
(1) The packed the batteries in box. Plastic bottles provided are used for water injection at once. It takes about 10~15 seconds for the batteries to absorb water. Please discard the water finally remained in the box.

After discarding the remained water, please turn on the light. If some water still remained in the box, it may cause short circuit. (The lighting may last for 100 hours)

(2) As the light being off, please use the provided plastic bottle to inject half bottle water.

The above procedure may repeat. The lighting can be continuous for about 20 days. (about 480 hours)

(Please close the cover of battery box to prevent evaporation of water)

Portable Flashlight
Product NO.: EN4609SS—1W+EN46—A4PO
(Battery is automatic water absorbing type and exchangable)

(Instructions for use)
(1) Please take it out of water with Initial water absorbing for 5~10 seconds, power will be generated. Please push the switch, the light will be on. (for about 100 hours)
(2) With the light being off, please absorb water for about 5~10 second again. Power will be generated again, then switch on and it will be light up again.
(3) The same procedure may repeat and take some time to final lighting up.

The light may be on continuously for about 10 days. (for about 240 hours)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>P/NO</th>
<th>Battery</th>
<th>Size mm</th>
<th>Weight g</th>
<th>LED Spec.</th>
<th>Initial LUX</th>
<th>Power W</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH-18LED Illuminator for Emergency</td>
<td>CH-18LED+AL-E3PO×4</td>
<td>AL-E3PO×4</td>
<td>260x260x360</td>
<td>3802</td>
<td>φ8 (8*8.7mm)</td>
<td>111</td>
<td>64</td>
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<tr>
<td>Portable Flashlight</td>
<td>EN4609SS—1W+EN46—A4PO</td>
<td>EN46—A4PO</td>
<td>φ46x95</td>
<td>86</td>
<td>φ8 (8*8.7mm)</td>
<td>20</td>
<td>13</td>
</tr>
</tbody>
</table>
Disaster Prevention · Disaster Reduction · Security Set
Final Fortress (For Emergency)

Portable Charger for Cell Phone

Product NO.: AL-G6SO
(Battery is automatic water absorbing type and exchangeable)

Plastic bottles provided are used for water injection at once. It takes about 10~15 seconds for the batteries to absorb water. Please discard the water finally remained in the box. please connect with the battery. After discarding the remained water. If some water still remained in the box, it may cause short circuit.

Charging experiment

Experimental Utility: SONY Xperia S39H (Battery Capacity: 2350mAh)
1st time charging: 0% ~ 100% 7 hours
2nd time charging: 0% ~ 100% 10 hours
3rd time charging: 0% ~ 20% 5 hours

Experimental Utility: SONY L39H (Battery Capacity: 3000mAh)
1st time charging: 0% ~ 100% 12.5 hours
2nd time charging: 0% ~ 100% 14 hours
3rd time charging: 0% ~ 4% 2 hours

Hand Back Light

Product NO.: EN3504E-1W+AL-F3PO
(Battery is automatic water absorbing type and exchangeable)

(Instructions for use)
(1) Please take it out of water with Initial water absorbing for 10 seconds, power will be generated. Please push the switch, the light will be on. (for about 100 hours)
(2) With the light being off, please absorb water for about 5~10 seconds again. Power will be generated again, then switch on and it will be light up again.
(3) The same procedure may repeat and take some time to final lighting up. The light may be on continuously for about 20 days. (for about 480 hours)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>P/NO</th>
<th>Battery</th>
<th>Size mm</th>
<th>Weight g</th>
<th>LED Spec.</th>
<th>Initial LUX</th>
<th>Power W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable Charger for Cell Phone</td>
<td>AL-G6SO</td>
<td>AL-G6SO</td>
<td>180x125x120</td>
<td>1235</td>
<td>φ35x40(8mm*8.7mm)</td>
<td>45</td>
<td>33</td>
</tr>
<tr>
<td>Hand-Back Light</td>
<td>EN3504E-1W+AL-F3PO</td>
<td>AL-F3PO</td>
<td>φ35x40(8mm*8.7mm)</td>
<td>146</td>
<td></td>
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</table>
**Indoor Illuminator**

(The white LED is licensed product.)

**Product NO.: CH-8LED×4+T3-D3P4SO×4**

(Battery is automatic water absorbing type and exchangable)

**Instruction for use**

(1) Please take it out of water with Initial water absorbing for 3 seconds, power will be generated. Please push the switch, the light will be on. (for about 100 hours)

(2) With the light being off, please absorb water for about 3 second again. Power will be generated again, then switch on and it will be light up again.

The same procedure may repeat and take some time to final lighting up.

The light may be on continuously for about 20 days. (for about 480 hours)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>P/NO</th>
<th>Battery</th>
<th>Size mm</th>
<th>Weight g</th>
<th>LED Spec.</th>
<th>Initial LUX</th>
<th>Power W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Illuminator</td>
<td>CH-8LED×4+T3-D3P4SO×4</td>
<td>T3-D3P4SO×4</td>
<td>360x210x160</td>
<td>2530</td>
<td>φ8</td>
<td>510</td>
<td>4w</td>
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<td></td>
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<td></td>
<td></td>
<td>(8*8.7mm)</td>
<td>178</td>
<td>55</td>
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<tr>
<td>Battery</td>
<td>T3-D3P4SO×4</td>
<td>D3P4S</td>
<td>170x60x50</td>
<td>280</td>
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LED4PCS Indoor Illuminator (for Emergency)
(The white LED is licensed product)

Product No.: CH-4+AL-E3POx2
(Battery is water injection type and exchangable)

Instructions for use
(1) Please take it out of water with Initial water absorbing for 5~10 seconds, power will be generated. Please push the switch, the light will be on. (for about 100 hours)
(2) With the light being off, please absorb water for about 5~10 second again. Power will be generated again, then switch on and it will be light up again.
(3) The same procedure may repeat and take some time to final lighting up.
The light may be on continuously for about 20 days. (for about 480 hours)
(4) If the box are used for serving water, all the water in the box can not be used, please discard the water remained. Please use the same procedure as the above.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>P/NO</th>
<th>Battery</th>
<th>Size (mm)</th>
<th>Weight (g)</th>
<th>LED Spec.</th>
<th>Initial LUX (1.5m)</th>
<th>Power W</th>
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</thead>
<tbody>
<tr>
<td>LED4PCS Indoor Illuminator</td>
<td>CH-4+AL-E3POx2</td>
<td>AL-E3POx2</td>
<td>160x120x170</td>
<td>1050</td>
<td>φ8 (8*8.7mm)</td>
<td>50</td>
<td>1.2</td>
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<tr>
<td>Battery</td>
<td>AL-E3PO</td>
<td>E3P</td>
<td>155x110x30</td>
<td>119</td>
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</table>
**Flashlight (Big)**

(The white LED is licensed product)

**Product No.:** EN4617SS−1W+EN46−B4PO

(Battery is automatic water absorbing type and exchangable)

**Instructions for use**

(1) Please take it out of water with Initial water absorbing for 5~10 seconds, power will be generated. Please push the switch, the light will be on. (for about 100 hours)

(2) With the light being off, please absorb water for about 5~10 seconds again. Power will be generated again then switch on and it will be light up again.

(3) The same procedure may repeat and take some time to final lighting up.

The light may be on continuously for about 20 days. (for about 480 hours)

**Cautions:**

Strict water injection may prolong the lighting.

Over dipped in water may shorten the lighting. Water absorption should be within 10 seconds.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>P/NO</th>
<th>Battery</th>
<th>Size (mm)</th>
<th>Weight (g)</th>
<th>LED Spec.</th>
<th>LUX 1.5m</th>
<th>Power W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashlight (Big)</td>
<td>EN4617SS−1W+EN46−B4PO</td>
<td>EN46−B4PO</td>
<td>φ46x170</td>
<td>145</td>
<td>φ8 (8*8.7mm)</td>
<td>15</td>
<td>0.8</td>
</tr>
<tr>
<td>Battery</td>
<td>EN46−B4PO</td>
<td>B4P</td>
<td>Φ42*100</td>
<td>56</td>
<td></td>
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Life Light

For Kids  Product No.: R8+AL-H2PON
For Adult  Product No.: R8+AL-H2PON (L)
(The difference between product for children and adult is only the length of rope. Battery is non-exchangable.)

Instructions for use
1. Life light is separately worn on wrist, different from life jacket, therefore, the approval of the Ministry of Land and transportation is unnecessary. Please wear the lift light on wrist. After being dipped into water for several seconds, the life light starts flashing and last for about 100 hours. The lifelight can flash in water for 5 days and on the surface of water for 14 days. On land, lifelight can flash for almost 30 days depending on water injection. But every 7 days, water injection is necessary.

Cautions:
Please keep the battery away from places of high humidity, it may cause power decreasing.

Guarding our Life!

Life Light  Wearing Sample No.1  Wearing Sample No.2

After being dipped into water for several seconds, the life light starts flashing

<table>
<thead>
<tr>
<th>Product Name</th>
<th>P/NO</th>
<th>Battery</th>
<th>Size mm</th>
<th>Weight g</th>
<th>LED Spec.</th>
<th>Otpical Range</th>
<th>Power W</th>
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<tbody>
<tr>
<td>For Kid</td>
<td>R8+AL-H2PON</td>
<td>AL-H2PON</td>
<td>80*130</td>
<td>90</td>
<td>CHIPLED</td>
<td>over500M</td>
<td>0.004</td>
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<tr>
<td>For Adult</td>
<td>R8+AL-H2PON (L)</td>
<td>AL-H2PON</td>
<td>80*130</td>
<td>90</td>
<td>CHIPLED</td>
<td>over500M</td>
<td>0.004</td>
</tr>
</tbody>
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OS System

Everybody with nursing job, do you feel troublesome for changing diaper?

Standard Complete Set Product No.: OS-ST

Receiver P/NO: OS-1 / Transmitter P/NO: OS-02 / Urine Sensor Pad (Water Battery) P/NO: OS-03

(Batter is automatic water absorbing type. Battery should be changed every time for sake of sanitary)

Instructions for Use

(1) Please insert the transmitter into the battery sheet and put it between urine taking pad and diaper.

OS system has 5 types.
ReceiverA type + TransmitterA1 ~ 5 set. For members management
ReceiverB type + TransmitterB1 ~ 5 set. For members management
ReceiverC type + TransmitterC1 ~ 5 set. For members management
ReceiverD type + TransmitterD1 ~ 5 set. For members management
ReceiverE type + TransmitterE1 ~ 5 set. For members management

If all the receivers are used, 25 members can be managed.
For other types by special order, maximum 120 members can be managed.

Cautions:

The Temperature of battery may increase with power generation, but there's no effect to the body.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>P/NO</th>
<th>Battery</th>
<th>Size mm</th>
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<td>OS-ST</td>
<td>OS-3</td>
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