March 2016

**Subject: testing WP battery from new supplier (SEMICOM)**

**The testing goal**

* Testing the new WP battery (from a new supplier) and comparing the results to approved battery (TAMUZ).

**Testing guidelines**

* Testing 1+2 will be performed on WP200 device imbedded 2.2216 & 3.2217
* Testing 3+4 will be performed on WP200 device imbedded 2.2216 & 3.2217 in double night.
* Testing 5+6 will be performed on WP200 device imbedded 2.2216 & 3.2217 in double night with full accessories (bracelet and SBP sensor).
* Values for testing: Discharge value, Battery voltage, charging time (min), Recording time (h).
* Testing will be performed on 5 batteries (new supplier – SEMICOM)
* Comparing test results with approved battery (TAMUZ) on the same devices.

**Test result**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| semicom |  | Start voltage(V) | 3.91 | 3.91 | 3.91 | 3.913 | 3.911 | TAMUZ Battery | |
| battrey SN | Test device | Testing Values | SN : 1 | SN : 2 | SN : 3 | SN : 4 | SN : 5 | TB201459 | TB201463 |
| Test :1 | WP200\* | Discharge value | 228 | 223 | 230 | 221 | 216 | 243 | 244 |
| Battery voltage | 3.86 - 4.11 | 3.86 - 4.11 | 3.86 - 4.11 | 3.85 - 4.11 | 3.85 - 4.12 | 3.82 - 4.11 | 3.82 - 4.12 |
| charging time (min) | 55 | 55 | 55 | 60 | 60 | 55 | 55 |
| Recording time (h) | 9.45 | 9.45 | 9.45 | 9.45 | 9.45 | 9.45 | 9.45 |
| Test :2 | UNIFIED | Discharge value | 219 | 221 | 222 | 229 | 230 | 230 | 237 |
| Battery voltage | 3.86 - 4.11 | 3.85 - 4.1 | 3.85 - 4.11 | 3.86 - 4.11 | 3.86 - 4.11 | 3.81 - 4.12 | 3.83 - 4.12 |
| charging time (min) | 55 | 60 | 55 | 55 | 61 | 55 | 50 |
| Recording time (h) | 10.06 | 10.06 | 10.06 | 10.06 | 10.06 | 10.06 | 10.06 |
| Test :3 | WP200\* double night | Discharge value | 196/83 | 230/91 | 201/77 | 195/84 | 194/85 | 215/94 | 217/100 |
| Battery voltage | 3.74 - 4.11 | 3.78 - 4.11 | 3.76 - 4.11 | 3.76 - 4.12 | 3.76 - 4.11 | 3.76 - 4.10 | 3.72 -4.11 |
| charging time (min) | 82 | 82 | 83 | 82 | 83 | 77 | 88 |
| Recording time (h) | 7.49/7.49 | 7.49/7.48 | 7.48/7.49 | 7.49/7.49 | 7.49/7.49 | 7.49/7.48 | 7.49/7.49 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| semicom |  | Start voltage(V) | 3.91 | 3.91 | 3.91 | 3.913 | 3.911 | TAMUZ Battery | |
| battrey SN | Test device | Testing Values | SN : 1 | SN : 2 | SN : 3 | SN : 4 | SN : 5 | TB201459 | TB201463 |
| Test :4 | UNIFIED double night | Discharge value | 200/96 | 191/85 | 201/85 | 204/90 | 202/88 | 211/92 | 217/93 |
| Battery voltage | 3.76 - 4.11 | 3.76 - 4.11 | 3.78 - 4.12 | 3.78 - 4.11 | 3.78 - 4.11 | 3.73 - 4.11 | 3.78 - 4.12 |
| charging time (min) | 88 | 82 | 82 | 83 | 88 | 77 | 71 |
| Recording time (h) | 8.05/8.05 | 8.06/8.06 | 8.05/8.05 | 8.05/8.05 | 8.05/8.05 | 8.05/8.04 | 8.05/8.05 |
| Test :5 | WP200\* double night full accessories | Discharge value | 167/82 | 164/74 | 175/73 | 170/79 | 171/74 | 186/87 | 185/71 |
| Battery voltage | 3.78 - 4.11 | 3.78 - 4.11 | 3.79 - 4.11 | 3.79 - 4.11 | 3.78 - 4.11 | 3.78 - 4.11 | 3.79 - 4.11 |
| charging time (min) | 66 | 71 | 71 | 71 | 71 | 72 | 65 |
| Recording time (h) | 7.49/7.49 | 7.49/7.49 | 7.49/7.49 | 7.49/7.49 | 7.49/7.49 | 7.49/7.48 | 7.49/7.49 |
| Test :6 | UNIFIED double night full accessories | Discharge value | 169/80 | 176/77 | 178/75 | 177/79 | 175/83 | 182/80 | 192/80 |
| Battery voltage | 3.79 - 4.11 | 3.79 - 4.11 | 3.79 - 4.11 | 3.79 - 4.11 | 3.78 - 4.12 | 3.79 - 4.12 | 3.79 - 4.11 |
| charging time (min) | 66 | 66 | 71 | 77 | 66 | 66 | 66 |
| Recording time (h) | 8.05/8.05 | 8.05/8.06 | 8.05/8.05 | 8.05/8.05 | 8.05/8.05 | 8.05/8.04 | 8.05/8.05 |

**Testing files:**

SEMICOM Battery testing : 

TAMUZ Battery testing : 

**Testing result :**

* According to result, it seems that the ranges of the results are the same, with both battery suppliers.
* The new battery supplier SEMICOM can be approved for use on WP devices.

The test performed by:

Oren Shema - Electronics Lab Technician

Date: ­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_