

## Overview of Lumi-Con's Bike-Energy-Harvester

|   |     | USB-D               | USB-P5        | USB-P12             | Condition / Note                |   |
|---|-----|---------------------|---------------|---------------------|---------------------------------|---|
| <b>USB-Output</b>                                 |     |                     |               |                     | USB-TYP-A                       |   |
| Output current                                    | A   | 1                   | 1,5           | 1,5                 | At 5V typ.                      |   |
| Overload shut down current                        | A   | 1,2                 | 1,7           | 1,7                 | Typ.                            |   |
| <b>Dynamo-Input</b>                               |     |                     |               |                     |                                 |   |
| Dynamo-Current (DC current into battery)          | A   | 0,35/0,45           | 0,8/1         | 0,8/1               | Typ./max, 18-30km/h             | 1 |
| Dynamo-electrical power (into battery, typ./max.) | W   | 2,8/3,8             | 6,4/8,4       | 6,4/8,4             | Voltage of battery: 8V/8,4V     | 2 |
| Load time to load battery to 80%                  | h   | 7                   | 3,1           | 3,1                 | typ., no output current         |   |
| <b>DC Input</b>                                   |     | Power-Plug<br>5,5mm | USB-<br>Micro | Power-Plug<br>5,5mm | Charger included                |   |
| Load current (current into battery, typ.)         | A   | 0,4                 | 0,5           | 1,5...2**           |                                 | 1 |
| Load current (current out of charger, typ.)       | A   | 0,4                 | 1...1,5**     | 1,7                 |                                 |   |
| Load power (into battery, typ.)                   | W   | 3,2                 | 4             | 12                  | A a battery voltage of 8V       | 2 |
| Specification of charger                          | V/A | 12V/0,7A            | 5V/2A         | 12V/2A              |                                 |   |
| Load time to load battery to 80%                  | h   | 6                   | 4             | <1,5                |                                 |   |
| <b>Battery power</b>                              |     |                     |               |                     | 2 cells with 4.2V each included |   |
| Standard cells                                    | Ah  | 2.5                 | 2.5           | 2.5                 |                                 |   |
| Standard cells – total power                      | Wh  | 21                  | 21            | 21                  | At a battery voltage of 8,4V    |   |
| Extended cells                                    | Ah  | 3.5                 | 3.5           | 3.5                 |                                 |   |
| Extended cells – total power                      | Wh  | ≈30                 | ≈30           | ≈30                 | At a battery voltage of 8,4V    |   |

All values are typical values for supplied chargers and cables.

1) Battery DC current, \*\* depending on battery voltage

2) Power into battery, max. battery voltage 8.4V

### USB-D

Good cost/performance ratio for medium requirements (e.g. for low power requirements of smartphones) and preferred overnight charging.

### USB-P5

Very high load currents from hub dynamo (up to 1A, at "normal" speeds >800mA) and medium load current from mains charger (5V/2A). Charging possible with available USB-charger or power packs (5V/2A, Lumi-Con guarantees function only with supplied charger).

### USB-P12

Very high load currents from hub dynamo (up to 1A, at "normal" speeds >800mA) and high load current from mains charger (12V/2A). Charging from mains within approx. 1.5h to 80%.

### USB-H

Set for removable mounting, for all version available.

### USB-E

Higher battery capacity (2 x 3.5Ah), for all version available.

### Accessories

Dynamo connector (Shimano), power connector 5.5mm (with/without 1m cable), USB-cable, mounting material, replacement battery (see also Data sheet USB-Zub and homepage [http://www.lumi-con.de/prod\\_USB\\_ger.html](http://www.lumi-con.de/prod_USB_ger.html)).

The information herein is given to describe certain components and shall not be considered as warranted characteristics.

Terms of delivery and rights to technical change reserved