

# EMMERICH

## Specification for Sealed Rechargeable Nickel Metal Hydride Battery

**Model:** EMMERICH NIMH AKKU C 5000 MAH FT-1Z (255042)

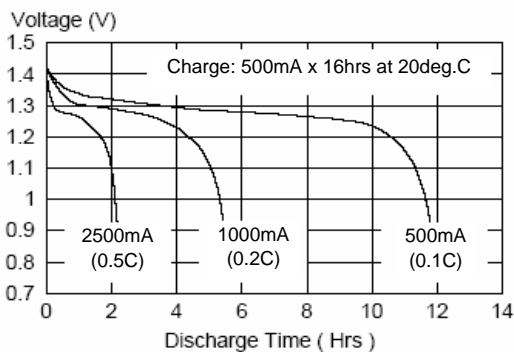
|                                  |                              |   |                  |  |                |
|----------------------------------|------------------------------|---|------------------|--|----------------|
| <b>Chemical System:</b>          | Nickel Metal Hydride         | Ni-MH                                   |                  |  |                |
| <b>Type</b>                      | C                            | Flat Tap                                |                  |  |                |
| <b>Nominal Voltage</b>           | Enhanced Capacity            | 1,2 V                                   |                  |  |                |
| <b>Nominal Capacity</b>          | Low Rate - 0.1C              | 5000 mAh                                |                  |  |                |
| <b>Weight</b>                    |                              | 90 g                                    |                  |  |                |
| <b>Capacity</b>                  |                              | <b>Charge</b>                           | <b>Discharge</b> | <b>Minimum</b>                         | <b>Typical</b> |
|                                  | <b>Low Rate - 0.1C</b>       | 0.1C                                    | 0.2C             | 5000 mAh                               | 5150 mAh       |
|                                  | <b>High Rate - 1C</b>        | 0.1C                                    | 1C               | 4400 mAh                               | 4600 mAh       |
| <b>Charging</b>                  |                              | <b>Standard</b>                         | <b>Quick*</b>    | <b>Fast*</b>                           |                |
|                                  | <b>Minimum Charge</b>        | 500 mA (0.1C)                           | 500 mA (0.1C)    | 500 mA (0.1C)                          |                |
|                                  | <b>Time Required (hrs)</b>   | 16 hrs                                  | 16 hrs           | 16 hrs                                 |                |
|                                  | <b>Maximum Charge</b>        | 1000 mA (0.2C)                          | 2500 mA (0.5C)   | 5000 mA (1C)                           |                |
|                                  | <b>Time Required (hrs)</b>   | < 8 hrs                                 | < 2.0 hrs        | < 60 min (or - Delta V)                |                |
|                                  | <b>Minimum Overcharge</b>    | 500 mA (0.1C)                           |                  |  |                |
|                                  | <b>Maximum Overcharge</b>    | 10000 mA with cut-off control           |                  |  |                |
| <b>Maximum Discharge Current</b> | <b>Continuous</b>            | 25 A                                    |                  |  |                |
|                                  | <b>Momentary (1 second )</b> | 75 A                                    |                  |  |                |
| <b>Internal Impedance</b>        | <b>Typical at 1000Hz</b>     | 12 milliohms upon fully charged         |                  |  |                |
| <b>Temperature</b>               |                              | <b>Storage for &lt; 1 Month (deg.C)</b> |                  | <b>Storage for &lt; 1 Year (deg.C)</b> |                |
|                                  | <b>Minimum</b>               | -20                                     |                  | -10                                    |                |
|                                  | <b>Maximum</b>               | 40                                      |                  | 30                                     |                |
|                                  |                              | <b>Discharge (deg.C)</b>                |                  | <b>Charge (deg.C)</b>                  |                |
|                                  | <b>Minimum</b>               | -20                                     |                  | 0                                      |                |
|                                  | <b>Maximum</b>               | 50                                      |                  | 45                                     |                |
| <b>Service Life</b>              | <b>Standard (IEC61951-2)</b> | upto 500 cycles (for reference)         |                  |  |                |
| <b>Designations</b>              |                              | <b>IEC 61951-2</b>                      |                  |  |                |

\* Quick and Fast charge require cut-off control circuitry to terminate charge or switch to trickle charge when cell reaches full charge

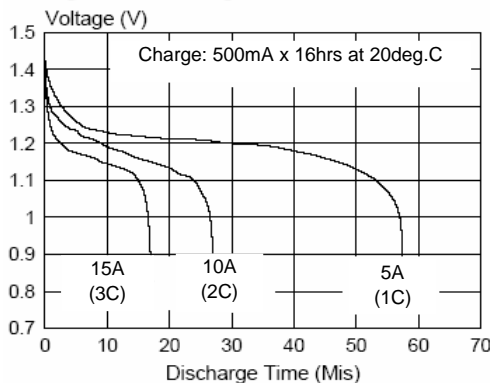
Remark: The information contained herein is presented only as a guide for the applications of our products

Data in this specification are subjected to change without notice and become contractual only after written confirmation by Emmerich.

**Low rate discharge**



**High Rate Discharge**



| Dimensions (mm) |      |       |
|-----------------|------|-------|
| D               | 25,5 | ± 0.5 |
| C               | 10,0 | ± 0.3 |
| H               | 49,5 | ± 0.5 |
| H1              | 0,3  | (REF) |

