

| SPECIFICATIONS FOR 2440 LiFe                          | 1 Cell  | 2 Cells      | 3 Cells      | 4 Cells       | 5 Cells       | 6 Cells       | 7 Cells       | 8 Cells       |
|---|---|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| Available versions                                    |   | x            |              |               | x             |               |               | x             |
| Input voltage:  | 90 - 264VAC   |              |              |               |               |               |               |               |
| Line frequency:                                       | 47 - 63Hz   |              |              |               |               |               |               |               |
| Max output power:                                     | 15W   | 29W          | 44W          | 58W           | 71W           | 72W           |               | 73W           |
| Ripple:   | <100mV p-p  |              |              |               |               |               |               |               |
| Efficiency (at 100% load, 230V) approx.:              | >60%  | >77%         | >80%         | >81%          | >85%          |               |               | >87%          |
| Leakage current from battery with mains switched off: | <0.4mA @3.2V  | <0.4mA @6.4V | <0.7mA @9.6V | <0.7mA @12.8V | <0.7mA @16.0V | <0.7mA @19.2V | <0.7mA @22.4V | <0.8mA @25.6V |
| Step 1 Charge current:                                | 4.0A ±0.2A  |              |              |               | 3.9A ±0.2A    | 3.3A ±0.1A    | 2.8A ±0.1A    | 2.5A ±0.1A    |
| Step 2 Charge voltage:                                | 3.65V ±0.05V  | 7.3V ±0.1V   | 10.95V ±0.1V | 14.6V ±0.1V   | 18.25V ±0.1V  | 21.9V ±0.2V   | 25.55V ±0.2V  | 29.2V ±0.2V   |
| - Charge current >: Orange - Charge current <: Yellow | 1.8A ±0.2A  | 1.8A ±0.1A   |              | 1.6A ±0.1A    |               |               | 0.8A ±0.1A    |               |
| Step 3 Charge termination I <: Green                  | 300mA   |              |              |               |               |               | 300mA ±25%    | 300mA         |
| Float charge voltage:                                 | 3.5V ±0.05V   | 7.0V ±0.1V   | 10.5V ±0.1V  | 14.0V ±0.1V   | 17.5V ±0.2V   | 21.0V ±0.2V   | 24.5V ±0.2V   | 28.0V ±0.2V   |
| NTC input on request (10K):                           | 0-45°C normal charge <0 or >45°C reduced charge (LED indication is yellow)                              |              |              |               |               |               |               |               |
| Switch frequency approx.:                             | 40kHz   |              |              |               |               |               |               |               |
| Protection:   | Protected against reversed polarity and short circuit proof   |              |              |               |               |               |               |               |
| Temperature range:                                    | Operating: ±25 to +40oC / Storage: ±25 to +85oC   |              |              |               |               |               |               |               |
| Safety:   | Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29                      |              |              |               |               |               |               |               |
| Insulation class :                                    | Class II. (Class I on request)  |              |              |               |               |               |               |               |
| Insulation voltage: Primary – secondary:              | 4000VAC / 5700VDC   |              |              |               |               |               |               |               |
| EMC standards:  | Med. EN 60601-1-2 / Emission EN 61000-6-3 / Immunity EN 61000-6-1                                       |              |              |               |               |               |               |               |
| Mains connection:                                     | 2-pins IEC 60320/C8 connector. (3-pins IEC 60320/C14 connector or non-detachable mains cord on request) |              |              |               |               |               |               |               |
| Output terminals:                                     | Battery clips or DC connector.  |              |              |               |               |               |               |               |
| IP-Grade:   | IP4X (IP67 on request).   |              |              |               |               |               |               |               |
| Dimensions:   | 135 x 80 x 44mm   |              |              |               |               |               |               |               |
| Weight:   | 390g (890g IP67 version)  |              |              |               |               |               |               |               |

| SPECIFICATIONS FOR 2440 LiFe                          | 9-cell  | 10-cell       | 11-cell       | 12-cell       | 13-cell       | 14-cell       | 15-cell       | 16-cell       |   |
|---|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---|
| Input voltage:  | 90 - 264VAC   |               |               |               |               |               |               |               |   |
| Available versions                                    |   |               |               | x             |               |               |               |               | x |
| Line frequency:                                       | 47 - 63Hz   |               |               |               |               |               |               |               |   |
| Max output power:                                     | 72W   | 71W           | 72W           |               | 71W           | 72W           | 71W           | 70W           |   |
| Ripple:   | <100mV p-p  |               |               |               |               |               |               |               |   |
| Efficiency (at 100% load, 230V) approx.:              | >85%  |               | >87%          |               |               |               |               |               |   |
| Leakage current from battery with mains switched off: | <1.5mA @28.8V   | <1.5mA @32.0V | <1.5mA @35.2V | <1.5mA @38.4V | <1.5mA @41.6V | <1.5mA @44.8V | <1.5mA @48.0V | <1.5mA @51.2V |   |
| Step 1 Charge current:                                | 2.2A ±0.2A  | 1.95A ±0.1A   | 1.8A ±0.1A    | 1.65A ±0.1A   | 1.5A ±0.1A    | 1.4A ±0.1A    | 1.3A ±0.1A    | 1.2A ±0.1A    |   |
| Step 2 Charge voltage:                                | 32.85V ±0.2V  | 36.5V ±0.2V   | 40.15V ±0.2V  | 43.8V ±0.3V   | 47.45V ±0.3V  | 51.1V ±0.3V   | 54.75V ±0.3V  | 58.4V ±0.3V   |   |
| - Charge current >: Orange - Charge current <: Yellow | 0.8A ±0.1A  |               |               | 0.6A ±0.1A    |               |               |               |               |   |
| Step 3 Charge termination I <: Green                  | 200mA   |               |               |               | 100mA         |               |               |               |   |
| Float charge voltage:                                 | 31.5V ±0.2V   | 35.0V ±0.2V   | 38.5V ±0.2V   | 42.0V ±0.3V   | 45.5V ±0.3V   | 49.0V ±0.3V   | 52.5V ±0.3V   | 56.0V ±0.3V   |   |
| NTC input on request (10K):                           | 0-45°C normal charge <0 or >45°C reduced charge (LED indication is yellow)                              |               |               |               |               |               |               |               |   |
| Switch frequency approx.:                             | 40kHz   |               |               |               |               |               |               |               |   |
| Protection:   | Protected against reversed polarity and short circuit proof   |               |               |               |               |               |               |               |   |
| Temperature range:                                    | Operating: ±25 to +40oC / Storage: ±25 to +85oC   |               |               |               |               |               |               |               |   |
| Safety:   | Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29                      |               |               |               |               |               |               |               |   |
| Insulation class :                                    | Class II. (Class I on request)  |               |               |               |               |               |               |               |   |
| Insulation voltage: Primary – secondary:              | 4000VAC / 5700VDC   |               |               |               |               |               |               |               |   |
| EMC standards:  | Med. EN 60601-1-2 / Emission EN 61000-6-3 / Immunity EN 61000-6-1                                       |               |               |               |               |               |               |               |   |
| Mains connection:                                     | 2-pins IEC 60320/C8 connector. (3-pins IEC 60320/C14 connector or non-detachable mains cord on request) |               |               |               |               |               |               |               |   |
| Output terminals:                                     | Battery clips or DC connector.  |               |               |               |               |               |               |               |   |
| IP-Grade:   | IP4X (IP67 on request).   |               |               |               |               |               |               |               |   |
| Dimensions:   | 135 x 80 x 44mm   |               |               |               |               |               |               |               |   |
| Weight:   | 390g (890g IP67 version)  |               |               |               |               |               |               |               |   |