

| SPECIFICATIONS FOR 2440 LI                            | 1 Cell                                                                                                  | 2 Cells                     | 3 Cells                      | 4 Cells                      | 5 Cells                      | 6 Cells                      | 7 Cells                      | 8 Cells                      |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Available versions                                    | x                                                                                                       |                             |                              |                              |                              |                              |                              |                              |
| Input voltage:                                        | 90 - 264VAC                                                                                             |                             |                              |                              |                              |                              |                              |                              |
| Line frequency:                                       | 47 - 63Hz                                                                                               |                             |                              |                              |                              |                              |                              |                              |
| Max output power:                                     | 17W                                                                                                     | 34W                         | 51W                          | 59W                          | 70W                          | 71W                          | 74W                          | 71W                          |
| Ripple:                                               | <100mV p-p                                                                                              |                             |                              |                              |                              |                              |                              |                              |
| Efficiency (at 100% load, 230V) approx.:              | >60%                                                                                                    | >80%                        | >81%                         | >85%                         |                              | >86%                         | >85%                         |                              |
| Leakage current from battery with mains switched off: | <0.4mA @ 3.7V                                                                                           | <0.4mA @ 7.4V               | <0.7mA @11.1V                | <0.7mA @14.8V                | <0.6mA @18.5V                | <0.7mA @22.2V                | <0.9mA@25.9V                 | <1.6mA @29.6V                |
| Step 1 Charge current:                                | 4.0A ±0.2A                                                                                              |                             |                              | 3.5A ±0.2A                   | 3.3A ±0.2A                   | 2.8A ±0.2A                   | 2.5A ±0.2A                   | 2.1A ±0.2A                   |
| Step 2 Charge voltage:                                | 4.2V ±0.05V                                                                                             | 8.4V ±0.1V                  | 12.6V ±0.1V                  | 16.8V ±0.1V                  | 21.0V ±0.1V                  | 25.2V ±0.2V                  | 29.4V ±0.2V                  | 33.6V ±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                                                                                                   |                             |                              |                              |                              |                              |                              |                              |
| Charge start Vbat <:                                  | 4.1V ±0.1V or mains                                                                                     | 8.0V ±0.1V or mains turn-on | 12.3V ±0.1V or mains turn-on | 16.4V ±0.1V or mains turn-on | 20.5V ±0.1V or mains turn-on | 24.6V ±0.2V or mains turn-on | 28.7V ±0.2V or mains turn-on | 32.8V ±0.2V or mains turn-on |
| 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 LI                            | 9-cell                                                                                                  | 10-cell                      | 11-cell                      | 12-cell                      | 13-cell                      | 14-cell                      | 15-cell                      | 16-cell                      |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Available versions                                    | x                                                                                                       |                              |                              |                              |                              |                              |                              |                              |
| Input voltage:                                        | 90 - 264VAC                                                                                             |                              |                              |                              |                              |                              |                              |                              |
| Line frequency:                                       | 47 - 63Hz                                                                                               |                              |                              |                              |                              |                              |                              |                              |
| Max output power:                                     | 72W                                                                                                     | 76W                          | 74W                          | 73W                          | 74W                          | 76W                          | 72W                          | 67W                          |
| Ripple:                                               | <100mV p-p                                                                                              |                              |                              |                              |                              |                              |                              |                              |
| Efficiency (at 100% load, 230V) approx.:              | 85%                                                                                                     | 88%                          | 87%                          |                              |                              | 88%                          | 87%                          |                              |
| Leakage current from battery with mains switched off: | <1.6mA @33.3V                                                                                           | <0.9mA @37.0V                | <1.6mA @40.7V                | <1.6mA @44.4V                | <1.6mA @48.1V                | <0.5mA @51.8V                | <1.6mA @55.5V                | <0.6mA @59.2V                |
| Step 1 Charge current:                                | 1.9A ±0.2A                                                                                              | 1.8A ±0.1A                   | 1.6A ±0.1A                   | 1.45A ±0.1A                  | 1.35A ±0.1A                  | 1.3A ±0.1A                   | 1.15A ±0.1A                  | 1.0A ±0.1A                   |
| Step 2 Charge voltage:                                | 37.8V ±0.2V                                                                                             | 42.0V ±0.2V                  | 46.2V ±0.2V                  | 50.4V ±0.3V                  | 54.6V ±0.3V                  | 58.8V ±0.3V                  | 63.0V ±0.3V                  | 67.2V ±0.3V                  |
| - Charge current >: Orange - Charge current <: Yellow | 0.8A ±0.1A                                                                                              |                              |                              | 0.6A ±0.1A                   |                              |                              |                              |                              |
| Step 3 Charge termination I <: Green                  | 200mA                                                                                                   |                              |                              |                              | 100mA                        |                              |                              |                              |
| Charge start Vbat <:                                  | 36.9V ±0.2V or mains turn-on                                                                            | 41.0V ±0.2V or mains turn-on | 45.1V ±0.2V or mains turn-on | 49.2V ±0.3V or mains turn-on | 53.3V ±0.3V or mains turn-on | 57.4V ±0.3V or mains turn-on | 61.5V ±0.3V or mains turn-on | 65.6V ±0.3V or mains turn-on |
| 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)                                                                                |                              |                              |                              |                              |                              |                              |                              |