

Data Sheet

Li-Ion Battery 18 V - 2,0 Ah, Part number 1300003463



Functions

- Intelligent battery management for long-lasting battery packs
- Patented "AIR COOLED" charging technology
- Permanent Electronic Single Cell Protection (ESCP), for particularly long life.
- Processor-controlled charge and discharge management
- Long storage capacity with almost no self-discharge
- LED Fuel gauge, displays remaining capacity
- No memory effect, Long storage capacity with almost no self-discharge

Characteristics

Voltage-Capacity-Energy-Power-Current	18V-2,0Ah-36Wh-450W-25A-92Wh/kg-79Wh/L
Cell dimension / number off cells	18650 / 5S1P = 5 cells
Weight / Size	400g / L121 x W80,5 x H46,5
Impedance 1,5Ah and 2,0Ah	R AC1KHz < 100mΩ, R DC < 150mΩ (delivery condition)
Impedance 3,0Ah	R AC1KHz < 120mΩ, R DC < 170mΩ (delivery condition)
Life cycle	> 500 cycles, C > 70% (T Ambient = 25°C, ½ I Nominal)
State of charge	25 - 30%

LED-Display

State of charge	LED1>20%, LED2>40%, LED3>60%, LED4>80% (7s)
Battery empty	LED1<20%, 2 times flashing
Electronic awake	LED 4, short flashing each 15 sec
Over voltage, Wire break	LED 1, 2 and 4, short flashing each 15 sec

Following Data must be strictly adhered

Battery Charging

Battery must only be charged using original ROTHENBERGER chargers!

Environmental Conditions

Temperature range	Storage: -20°C G 60°C / Application: -20°C G 50°C
Humidity	< 90% (non-condensing)
Vibrations- and Shock stress	< 5G, (x-, y-, z-axis)

Guaranteed Equipment Functions

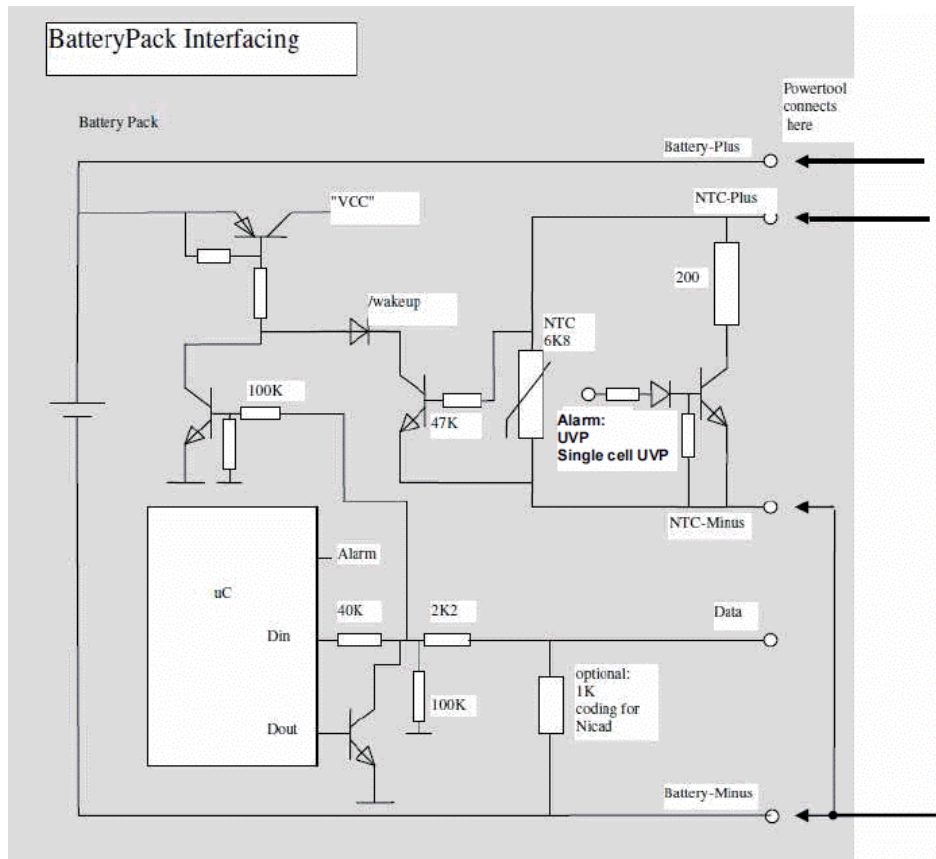
Over current cut-off	35A / 30s, 50A / 1s, 100A / 0,1s
Temperature cut-off	> 75°C, R NTC < 1.000Ω (Sensor NTC 6,8k / B3950)
Under voltage cut-off, under Load	< 12,5V / 1s
Under voltage cut-off, without Load	> 15V
Current drain in Sleep Mode or U<15V	< 5μA
Battery feedback current	4A / max. 4s, max. 21,15V
Over voltage cut-off	Data Warning > 21V, T+ cut-off > 21,15V

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Electronic wakeup and auto sleep mode:

- 10s after switch pushing
- 60s after power tool wake up (T+)
- Wake up with push-button „Data = High (Pull-up 9k -> 5V)“ or „Power tool (T+)“
- Alive if „Data = High“ or „Over voltage“ existing



Certification

Battery is certified regarding UN Transportation 38.3 and IEC 62133

Transportation

Shipping of the battery must guarantee according ZVEI-EPTA-IVG-guidelines

<http://www.zvei.org/Verband/Fachverbaende/Elektrowerkzeuge/Seiten/Neue-Merkblaetter-Transport-von-Lithium-Ionen-Batterien.aspx>

Approval

For the complete battery system approval, the customer have to send a sample device including functional description. The reference sample stay at ROTHENBERGER.

Application

Battery used together with equipment:

- | | |
|----------|----------|
| 1) _____ | 2) _____ |
| 3) _____ | 4) _____ |
| 5) _____ | 6) _____ |
| 7) _____ | 8) _____ |

Place / Date

Signature / Customer

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