

**BMS battery management system for lithium rechargeable battery pack****Model: BMS NOVA-18S BK4****Electrical Characteristics**

No.	Test item		Criterion
1	Type of cells	Type	All rechargeable lithium
		Number of cells	8÷18
		Range voltage for single cell	1,5÷4,5 VDC
		Cells in series	yes 8÷18
		Cells in parallels	yes
2	Voltage	Range min/max	35÷80 VDC
		Minimum voltage measured	1 mV
3	Current	Low Current consumption for single cell with auxiliary charger	≤200 nA
		Maximal continuous charging current	10 A
		Maximal continuous discharging current Standard power version	50 A
		Maximal continuous discharging current High power version	80 A
		Minimum measured current	10 mA
4	Balance	Type of Balance	Passive
		Number of balance	three type (A,B,C)
		Minimum balance voltage for single cell	1 mV
		Balance current for single cell	150 mA
5	Over charge Protection	Over charge detection voltage	settable ±1mV
		Over charge release voltage	settable ±1mV
6	Over discharge protection	Over discharge detection voltage	settable ±1mV
		Over discharge release voltage	settable ±1mV
7	Over discharge current protection	Over discharge detection current	settable ±1A
		Detection delay time	settable ±1s
		2 different level of protection	
8	Over charge current protection	Over charge detection current	settable ±1A
		Detection delay time	settable ±1s
9	Shorth circuit	Shorth circuit max current	yes
		Settable on/off	yes
10	Temperature	Number of sensors of temperature	2
		Battery temperature misure	settable ±1°C
		PCB temperature misure	settable ±1°C
11	Time	Real time clock	yes
		Auto power off	settable ≥1min
		End of charge power off	settable ≥1min
		Extreme low battery protection power off	settable ≥1min



BMS battery management system for lithium rechargeable battery pack			
Model: BMS NOVA-18S BK4			
Communications			
1	Communication	Buzzer	yes
		USB	1
		PWM opto isolated	1
		TX opto isolated	1
		RS485 opto isolated	1
		i2C	no
		Digital output Special version	4
		Digital input Special version	4
		Led command output	4
		Led view system state	2
		Bluetooth	yes
		Settable by PC	yes
		2	Software of communication
3	Communication with smartphone	Application Android	yes
4	Communication with smartphone	Application ios	yes

BMS battery management system for lithium rechargeable battery pack			
Model: BMS NOVA-18S BK4			
Internal memory of the BMS			
No.	Test item		Criterion
1	Time	Day last charge	yes
		Data of last charge	yes
		Charge cycles	yes
		Max time between charges counter	yes
2	Current	Register of Amper/hours	yes
3	Operation data	Internal register	12 parameters
4	Production data	Internal register	6 parameters
5	Historical log data	Register fifo	64 events
6	Historical day register	Register fifo	400 day


BMS battery management system for lithium rechargeable battery pack
Model: BMS NOVA-18S BK4
Electrical and Mechanical Characteristics

No.	Test item		Criterion
1	Type of core	Micro Controller	16 bit
2	Misure current	Analog-to-Digital Converters	16 bit
3	Misure Voltage	Analog-to-Digital Converters	16 bit
4	Power regulator	Switching Regulators	high efficiency
5	ON/OFF	Single switch SPST Special version	yes
		Single push button Standard version	yes
6	Efficiency BMS	At maximun power	99,98%
7	Led 1	State views	25% SOC
8	Led 2	State views	50% SOC
9	Led 3	State views	75% SOC
10	Led 4	State views	100% SOC
11	Fuse power	80V	Settable current
12	Bidirectional charge interruption		yes
13	Precharge output load		yes
14	Power consumption	Stand By State	≤200 nA
15	Power consumption	ON State	≤30 mA
16	Connection aux charger	Faston male	One 4,8*0,8 mm
17	Connection power fuse	Power connector Press Fit	Two screw M6
18	Connection power charge	Power connector Press Fit	Two screw M5
19	Connection power load	Power connector Press Fit	Two screw M5
20	PCB	Command	FR4
		Power	CM3
21	Weight	Measure	249 g
22	Dimension	Measure	210*100*20 mm
23	IP International Protection	Rating	no
24	Case	Type	no
25	Temperature	Operating Temperature Range	-20, +70 °C
		Storage Temperature Range	-20, +85 °C



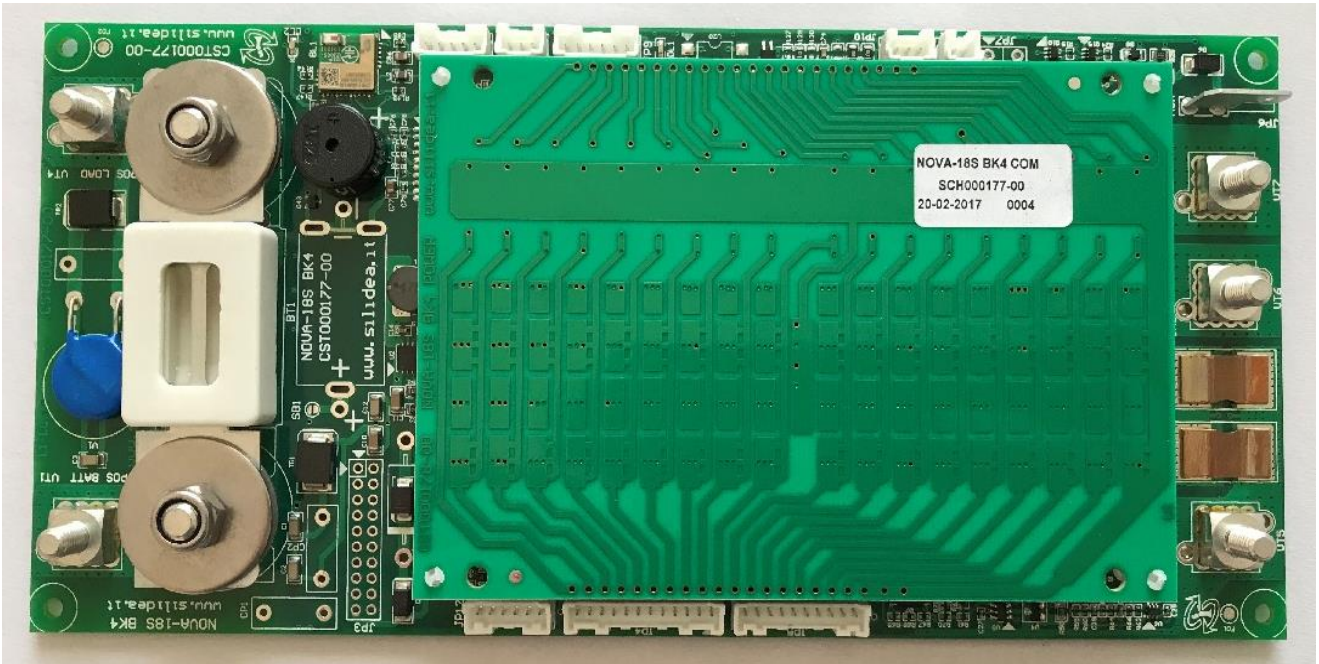
SILIDEA S.r.l.

Piazza Ragazzi, 14/2
45035 Castelmassa (RO) Italy
Tel. +39 0425 843129
PIVA - C.F.: 01313170290

R.E.A. di Rovigo 145241
Cap. Soc. Euro 25.000,00 i.v.
web-site: www.silidea.it
e-mail: info@silidea.it



Photo of the product:



Designed by:

www.silidea.it

www.silidea.com

info@silidea.it

2017-03-30 REV00