NED ENERGY LIMITED

MAX LiON

SOLAR LITHIUM BATTERIES

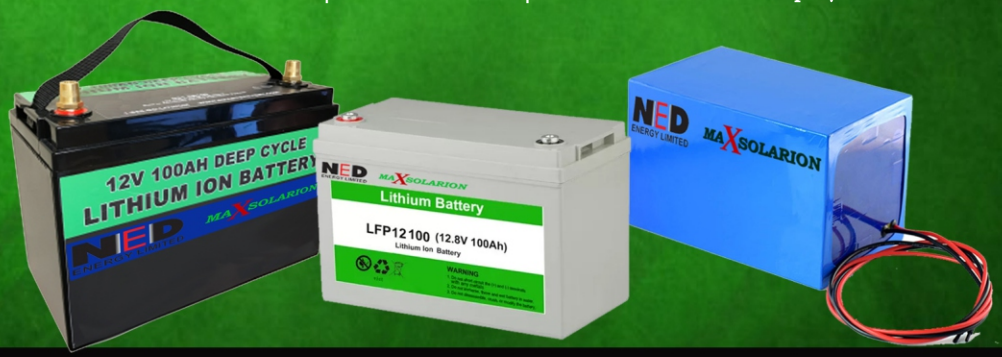
NED ENERGY

MORE THAN 20 YEARS

EXPERTISE IN BATTERY BUSINESS WITH PATENTS IN HAND

TESTED & CERTIFIED

ISO 9001:2015 | ISO 14001 :2015 | BS ISO 45001:2018 Company



www.nedenergy.in

MAKE IN INDIA

BATTERY FEATURES AND CUSTOMER BENEFITS

* High Energy Density
* Efficient (High Round Trip (Wh) Efficiency)
* Rugged
* Compact & Light
* Fast Charging Capability
* Longer Cyclic Life
* Over Charge & Over Discharge Cut Off facility
* High Temperature Performance
* Eco Friendly
* Fast Charge and Discharge Capability
* Cells sorted on Automatic Cell Sorting Machine
* Cells welded on Automatic Cell Welding Machine

NED™ ENERGY

MAX LiON SOLAR LITHIUM BATTERIES — Li Fe Po 4 (LFP) SOLAR LITHIUM BATTERIES MODELS

Table 1

NED MODEL DESCRIPTION	Units	NED - LFP - S - 12.8 - 6	NED - LFP - S - 12.8 - 12	NED - LFP - S - 12.8 - 18	NED - LFP - S - 12.8 - 24	NED - LFP - S - 12.8 - 30	NED - LFP - S - 12.8 - 36
PERFORMANCE CONFORMS TO IS No.		IS 16046 - (Part 2) : 2018					
PERFORMANCE CONFORMS TO IEC No.		IEC 62133 - 2 : 2017					
BATTERY PACK APPROVED BY BIS		YES					
CHEMISTRY		LiFePo4 (LFP)					
BATTERY PACK DESCRIPTION		12.8 V, 6 Ah	12.8 V, 12 Ah	12.8 V, 18 Ah	12.8 V, 24 Ah	12.8 V, 30 Ah	12.8 V, 36 Ah
NOMINAL VOLTAGE	V	12.8	12.8	12.8	12.8	12.8	12.8
NOMINAL CAPACITY	Ah	6	12	18	24	30	36
RECOMMENDED OPERARATING VOLTAGE RANGE	V	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2
BTY PACK CONFIGURATION (SERIES & PARALLEL)		4S1P	4S2P	4S3P	4S4P	4S5P	4S6P
NOMINAL ENERGY	Wh	76.8	153.6	230.4	307.2	384	460.8
CHARGING VOLTAGE	V	14.6	14.6	14.6	14.6	14.6	14.6
END VOLTAGE	V	10	10	10	10	10	10
STANDARD CHARGING CURRENT	A	2	4	6	8	10	12
MAX CHARGING CURRENT	A	3	6	9	12	15	18
STANDARD DISCHARGING CURRENT	A	2	4	6	8	10	12
MAX DISCHARGING CURRENT	A	3	6	9	12	15	18
OPERATING TEMPERATURE	°C	0 °C - 50 °C					
STORAGE TEMPERATURE	°C	-10 °C - 45 °C					
OPERATING HUMIDITY	%	0 - 90 % Rh Non Condensing					
CYCLIC LIFE (Full Charge to Full Discharg @ 27 °C)	Nos	> 2500 @ 100 % DoD					
BMS PROTECTION FEATURES		Against Deep Discharge, Against Over Charge, Cell Balancing, Short Circuit Protection, Over Temperature Protection					
ENCLOSURE TYPE		PVC Pastic Shrink Wrap					

Table 2

NED MODEL DESCRIPTION	Units	NED - LFP - S - 12.8 - 42	NED - LFP - S - 12.8 - 48	NED - LFP - S - 12.8 - 54	NED - LFP - S - 12.8 - 60	NED - LFP - S - 12.8 - 66	NED - LFP - S - 12.8 - 72
PERFORMANCE CONFORMS TO IS No.		IS 16046 - (Part 2) : 2018					
PERFORMANCE CONFORMS TO IEC No.		IEC 62133 - 2 : 2017					
BATTERY PACK APPROVED BY BIS		YES					
CHEMISTRY		LiFePo4 (LFP)					
BATTERY PACK DESCRIPTION		12.8 V, 42 Ah	12.8 V, 48 Ah	12.8 V, 54 Ah	12.8 V, 60 Ah	12.8 V, 66 Ah	12.8 V, 72Ah
NOMINAL VOLTAGE	V	12.8	12.8	12.8	12.8	12.8	12.8
NOMINAL CAPACITY	Ah	42	48	54	60	66	72
RECOMMENDED OPERARATING VOLTAGE RANGE	V	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2
BTY PACK CONFIGURATION (SERIES & PARALLEL)		4S7P	4S8P	4S9P	4S10P	4S11P	4S12P
NOMINAL ENERGY	Wh	537.6	614.4	691.2	768	844.8	921.6
CHARGING VOLTAGE	V	14.6	14.6	14.6	14.6	14.6	14.6
END VOLTAGE	V	10	10	10	10	10	10
STANDARD CHARGING CURRENT	A	14	16	18	20	22	24
MAX CHARGING CURRENT	A	21	24	27	30	33	36
STANDARD DISCHARGING CURRENT	A	14	16	18	20	22	24
MAX DISCHARGING CURRENT	A	21	24	27	30	33	36
OPERATING TEMPERATURE	°C	0 °C - 50 °C					
STORAGE TEMPERATURE	°C	-10 °C - 45 °C					
OPERATING HUMIDITY	%	0 - 90 % Rh Non Condensing					
CYCLIC LIFE (Full Charge to Full Discharg @ 27 °C)	Nos	> 2500 @ 100 % DoD					
BMS PROTECTION FEATURES		Against Deep Discharge, Against Over Charge, Cell Balancing, Short Circuit Protection, Over Temperature Protection					
ENCLOSURE TYPE		PVC Pastic Shrink Wrap					

MAX LiON SOLAR LITHIUM BATTERIES

MAX LiON SOLAR LITHIUM BATTERIES Li Fe Po 4 (LFP) SOLAR LITHIUM BATTERIES MODELS

Table 3

NED MODEL DESCRIPTION	Units	NED - LFP - S - 12.8 - 78	NED - LFP - S - 12.8 - 84	NED - LFP - S - 12.8 - 90	NED - LFP - S - 12.8 - 96	NED - LFP - S - 12.8 - 102	NED - LFP - S - 12.8 - 108	NED - LFP - S - 12.8 -114
PERFORMANCE CONFORMS TO IS No.		IS 16046 - (Part 2) : 2018						
PERFORMANCE CONFORMS TO IEC No.		IEC 62133 - 2 : 2017						
BATTERY PACK APPROVED BY BIS		YES						
CHEMISTRY		LiFePo4 (LFP)						
BATTERY PACK DESCRIPTION		12.8 V, 78Ah	12.8 V, 84 Ah	12.8 V, 90 Ah	12.8 V, 96 Ah	12.8 V, 102 Ah	12.8 V, 108 Ah	12.8 V, 114 Ah
NOMINAL VOLTAGE	V	12.8	12.8	12.8	12.8	12.8	12.8	12.8
NOMINAL CAPACITY	Ah	78	84	90	96	102	108	114
RECOMMENDED OPERARATING VOLTAGE RANGE	V	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2	10 V - 14.8 V ±0.2
BTY PACK CONFIGURATION (SERIES & PARALLEL)		4S13P	4S14P	4S15P	4S16P	4S17P	4S18P	4S19P
NOMINAL ENERGY	Wh	998.4	1075.2	1152	1228.8	1305.6	1382.4	1459.2
CHARGING VOLTAGE	V	14.6	14.6	14.6	14.6	14.6	14.6	14.6
END VOLTAGE	V	10	10	10	10	10	10	10
STANDARD CHARGING CURRENT	A	25.9974	27.9972	29.997	31.9968	33.9966	35.9964	37.9962
MAX CHARGING CURRENT	A	39	42	45	48	51	54	57
STANDARD DISCHARGING CURRENT	A	25.974	27.972	29.97	31.968	33.966	35.964	37.962
MAX DISCHARGING CURRENT	A	39	42	45	48	51	54	57
OPERATING TEMPERATURE	°C	0 °C - 50 °C						
STORAGE TEMPERATURE	°C	-10 °C - 45 °C						
OPERATING HUMIDITY	%	0 - 90 % Rh Non Condensing						
CYCLIC LIFE (Full Charge to Full Discharg @ 27 °C)	Nos	> 2500 @ 100 % DoD						
BMS PROTECTION FEATURES		Against Deep Discharge, Against Over Charge, Cell Balancing, Short Circuit Protection, Over Temperature Protection						
ENCLOSURE TYPE		PVC Pastic Shrink Wrap						

MAX LiON SOLAR LITHIUM BATTERIES Li Ion (NMC) SOLAR LITHIUM BATTERIES MODELS

Table 1

NED MODEL DESCRIPTION	Units	NED - NMC - S - 11.1 - 2.2	NED - NMC - S - 11.1 - 4.4	NED - NMC - S - 11.1 - 6.6	NED - NMC - S - 11.1 - 8.8	NED - NMC - S - 11.1 - 11	NED - NMC - S - 11.1 - 13.2
PERFORMANCE CONFORMS TO INDIAN STANDARD		IS 16046 - (Part 2) : 2018					
PERFORMANCE CONFORMS TO IEC STANDARD		IEC 62133 - 2 : 2017					
BATTERY PACK APPROVED BY BIS		YES					
CHEMISTRY		Lithium Ion (NMC)					
BATTERY PACK DESCRIPTION		11.1 V, 2.2 Ah	11.1 V, 4.4 Ah	11.1 V, 6.6 Ah	11.1 V, 8.8 Ah	11.1 V ,11 Ah	11.1 V, 13.2 Ah
NOMINAL VOLTAGE	V	11.1	11.1	11.1	11.1	11.1	11.1
NOMINAL CAPACITY	Ah	2.2	4.4	6.6	8.8	11	13.2
RECOMMENDED OPERARATING VOLTAGE RANGE	V	9 V - 12.6 V ±0.2	9 V - 12.6 V ±0.2	9 V - 12.6 V ±0.2	9 V - 12.6 V ±0.2	9 V - 12.6 V ±0.2	9 V - 12.6 V ±0.2
BTY PACK CONFIGURATION (SERIES & PARALLEL)		3S1P	3S2P	3S3P	3S4P	3S5P	3S6P
NOMINAL ENERGY	Wh	24.42	48.84	73.26	97.68	122.1	146.52
CHARGING VOLTAGE	V	12.6	12.6	12.6	12.6	12.6	12.6
END VOLTAGE	V	9	9	9	9	9	9
STANDARD CHARGING CURRENT	A	0.44	0.88	1.32	1.76	2.2	2.64
MAX CHARGING CURRENT	A	1.1	2.2	3.3	4.4	5.5	6.6
STANDARD DISCHARGING CURRENT	A	1.1	2.2	3.3	4.4	5.5	6.6
MAX DISCHARGING CURRENT	A	2.2	4.4	6.6	8.8	11	13.2
OPERATING TEMPERATURE	°C	0 °C - 45 °C					
STORAGE TEMPERATURE	°C	-10 °C - 45 °C					
OPERATING HUMIDITY	%	0 - 90 % Rh Non Condensing					
CYCLIC LIFE (Full Charge to Full Discharg @ 27 °C)	Nos	> 1500 @ 100 % DoD					
BMS PROTECTION FEATURES		Against Deep Discharge, Against Over Charge, Cell Balancing, Short Circuit Protection, Over Temperature Protection					
ENCLOSURE TYPE		PVC Pastic Shrink Wrap					

www.nedenergy.in

: +91-85559 00637

: customersupport@nedenergy.in

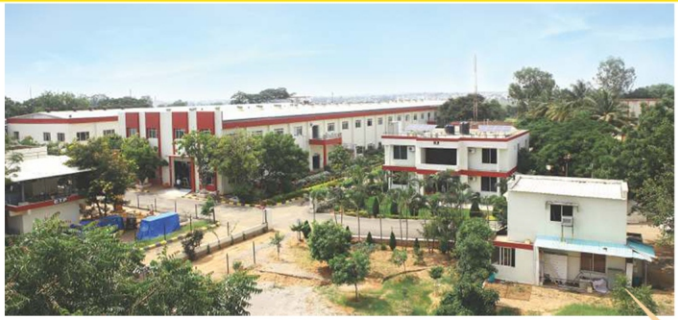
MAX LiON Li Ion (NMC) SOLAR LITHIUM BATTERIES MODELS

Table 2

NED MODEL DESCRIPTION	Units	NED - NMC - S - 11.1 - 15.4	NED - NMC - S - 11.1 - 17.6	NED - NMC - S - 11.1 - 19.8	NED - NMC - S - 11.1 - 2	NED - NMC - S - 11.1 - 4	NED - NMC - S - 11.1 - 6
PERFORMANCE CONFORMS TO INDIAN STANDARD		IS 16046 - (Part 2) : 2018					
PERFORMANCE CONFORMS TO IEC STANDARD		IEC 62133 - 2 : 2017					
BATTERY PACK APPROVED BY BIS		YES					
CHEMISTRY		Lithium Ion (NMC)					
BATTERY PACK DESCRIPTION		11.1 V, 15.4 Ah	11.1 V, 17.6 Ah	11.1 V, 19.8 Ah	11.1 V 2Ah	11.1 V 4Ah	11.1 V 6Ah
NOMINAL VOLTAGE	V	11.1	11.1	11.1	11.1	11.1	11.1
NOMINAL CAPACITY	Ah	15.4	17.6	19.8	2	4	6
RECOMMENDED OPERARATING VOLTAGE RANGE	V	9 V - 12.6 V± 0.2	9 V - 12.6 V± 0.2	9 V - 12.6 V± 0.2	9 V - 12.6 V± 0.2	9 V - 12.6 V± 0.2	9 V - 12.6 V± 0.2
BTY PACK CONFIGURATION (SERIES & PARALLEL)		3S7P	3S8P	3S9P	3S1P	3S2P	3S3P
NOMINAL ENERGY	Wh	170.94	195.36	219.78	22.2	44.4	66.6
CHARGING VOLTAGE	V	12.6	12.6	12.6	12.6	12.6	12.6
END VOLTAGE	V	9	9	9	9	9	9
STANDARD CHARGING CURRENT	A	3.08	3.52	3.96	0.6666	1.3332	1.9998
MAX CHARGING CURRENT	A	7.7	8.8	9.9	1	2	3
STANDARD DISCHARGING CURRENT	A	7.7	8.8	9.9	0.666	1.332	1.998
MAX DISCHARGING CURRENT	A	15.4	17.6	19.8	1	2	3
OPERATING TEMPERATURE	° C	0 ° C - 45 ° C					
STORAGE TEMPERATURE	° C	-10 ° C - 45 ° C					
OPERATING HUMIDITY	%	0 - 90 % Rh Non Condensing					
CYCLIC LIFE(Full Charge to Full Discharg @ 27 C)	Nos	> 1500 @ 100 % DoD					
BMS PROTECTION FEATURES		Against Deep Discharge, Against Over Charge, Cell Balancing, Short Circuit Protection, Over Temperature Protection					
ENCLOSURE TYPE		PVC Pastic Shrink Wrap					

Table 3

NED MODEL DESCRIPTION	Units	NED - NMC - S - 11.1 - 8	NED - NMC - S - 11.1 - 10	NED - NMC - S - 11.1 - 12	NED - NMC - S - 11.1 - 14	NED - NMC - S - 11.1 - 16	NED - NMC - S - 11.1 - 18	NED - NMC - S - 11.1 - 20
PERFORMANCE CONFORMS TO INDIAN STANDARD		IS 16046 - (Part 2) : 2018						
PERFORMANCE CONFORMS TO IEC STANDARD		IEC 62133 - 2 : 2017						
BATTERY PACK APPROVED BY BIS		YES						
CHEMISTRY		Lithium Ion (NMC)						
BATTERY PACK DESCRIPTION		11.1 V 8Ah	11.1 V 10Ah	11.1 V 12Ah	11.1 V 14 Ah	11.1 V 16 Ah	11.1 V 18Ah	11.1 V 20Ah
NOMINAL VOLTAGE	V	11.1	11.1	11.1	11.1	11.1	11.1	11.1
NOMINAL CAPACITY	Ah	8	10	12	14	16	18	20
RECOMMENDED OPERARATING VOLTAGE RANGE	V	9 V - 12.6 V ± 0.2	9 V - 12.6 V ± 0.2	9 V - 12.6 V ± 0.2	9 V - 12.6 V ± 0.2	9 V - 12.6 V ± 0.2	9 V - 12.6 V ± 0.2	9 V - 12.6 V ± 0.2
BTY PACK CONFIGURATION (SERIES & PARALLEL)		3S4P	3S5P	3S6P	3S7P	3S8P	3S9P	3S10P
NOMINAL ENERGY	Wh	88.8	111	133.2	155.4	177.6	199.8	222
CHARGING VOLTAGE	V	12.6	12.6	12.6	12.6	12.6	12.6	12.6
END VOLTAGE	V	9	9	9	9	9	9	9
STANDARD CHARGING CURRENT	A	2.6664	3.333	3.9996	4.6662	5.3328	5.9994	6.666
MAX CHARGING CURRENT	A	4	5	6	7	8	9	10
STANDARD DISCHARGING CURRENT	A	2.664	3.33	3.996	4.662	5.328	5.994	6.66
MAX DISCHARGING CURRENT	A	4	5	6	7	8	9	10
OPERATING TEMPERATURE	° C	0 ° C - 45 ° C						
STORAGE TEMPERATURE	° C	-10 ° C - 45 ° C						
OPERATING HUMIDITY	%	0 - 90 % Rh Non Condensing						
CYCLIC LIFE (Full Charge to Full Discharg @ 27 °C)	Nos	> 1500 @ 100 % DoD						
BMS PROTECTION FEATURES		Against Deep Discharge, Against Over Charge, Cell Balancing, Short Circuit Protection, Over Temperature Protection						
ENCLOSURE TYPE		PVC Pastic Shrink Wrap						



NED Energy Limited is a Subsidiary of a leading Indian Polymer conglomerate M/s Time Technoplast Limited

IS 16046- 2 : 2018

IEC 62133-2 : 2017

NED Energy LTD, Sy No 823 & 827 Medchal (V&M, Medchal, Secunderabad, Telangana 501401

Contact Number : +91 7075 72 73 76