

One Stop Energy Storage Solutions

NED

ENERGY LIMITED

AN ISO 9001:2015 | ISO 14001 :2015
BS ISO 45001:2008 COMPANY



VRLA
BATTERIES

LMLA
BATTERIES



**VALVE - REGULATED / LOW MAINTENANCE
LEAD ACID BATTERIES**



A Group Company of



TIME TECHNOPLAST LTD.
ISO 9001, 14001 & 18001 Certified





About NED:

NED Energy Limited is a leading manufacturer of Lead Acid batteries based out of Hyderabad Incorporated in 1998. The company has an excellent track record with an annual Production Capacity of 250 million Ah. NED Energy Limited is a Subsidiary of a leading Indian Polymer conglomerate M/s **Time Technoplast Limited** with Annual Turn-over of INR 4000 crore. The company covers a range of energy storage systems including LMLA flooded batteries which are manufactured by our subsidiary M/s **Power Build Batteries Private Limited**, Bangalore.

NED Energy Limited is an R&D Driven Company with support from Indian Institute of Science and Recognized by Department of Scientific & Industrial Research, Government of India and it has to its credit 18 papers and 8 patents. The company is an ISO 9001:2015, ISO 14001:2015, BS ISO 45001:2018 & UL 1969 and has product certifications from NISE, CPRI & ERTL. We have wide range of MNRE Approved Product and approvals, Patents, Publications & R&D Projects and are approved by RDSO for Indian Railways, Monorail & Metro rail

NED Energy Limited batteries are used in Telecom, Power Substation, Data centers, Solar offgrid and hybrid systems, Indian Railways, various PSU's, UPS System, Inverter and Export. Some of our clients include L&T, Reliance, Indian Railways, BSNL, Indus Towers Ltd., Idea, Bharti infratel, American Tower Company, Tata Power Solar, Su-kam, Wipro, Central Electronics Ltd., Bharat Heavy Electrical Ltd and many more.

PRODUCT SPECIFICATIONS

DESCRIPTION	MAXLIFE	MAXQUALITA <small>TUBULAR GEL VRLA BATTERY</small>
Electrolyte	Immobilized H2SO4	Immobilized H2SO4 with added Silica Gel
Positive Plate Alloy	Pb-Ca-Sn Alloy	XL Lead Alloy
Positive Plate Type	Flat Pasted	Tubular
Negative Plate	Flat Pasted	Flat Pasted
Method of connection between cells	Bolted	Bolted
Type of Separator material	AGM	AGM & SYNTHETIC
Container Material	PPCP	PPCP
Recommended charging method	Constant Potential	Constant Potential
Recommended Storage period before freshening charge at 27°C.	6 Months	12 Months
Self discharge	<1% per week	<1% per week
AH Efficiency	>90%	>95%
WH Efficiency	>80%	>85%
Float Charge Voltage	2.25V-2.27V/Cell	2.3V-2.33V/Cell
Boost Charge Voltage	2.3V-2.35V/Cell	2.35V-2.4V/Cell
Charging Time from 20% SOC to 90% SO	6-8Hrs	8-12Hrs
Operating Temperature Range	0°C to 55°C	-20 °C to 55°C
Float Service Life at 27°C	8-12Years	10-15Years
Design Life at 27°C	20 Years	20 Years
Cyclic Service Life (@ 27°C)		
At 20% D.O.D	3800 Cycles	5500 Cycles
At 50% D.O.D	1800 Cycles	2800 Cycles
At 80% D.O.D	1200 Cycles	2000 Cycles
Maximum Recommended DOD	50%	80%
Product Performance Conforms to	TEC/GR/TX/BAT-001/04.JUN.2011	TEC/GR/TX/BAT-003/02.MAR.2011
	IS 15549/ IS 16270	IS 15549/ IS 16270
	IEC 60896-21/22	IEC 60896-21/22

UNIQUE PRODUCT FEATURES

- Proprietary Positive Grid Alloy
- Proprietary Positive Paste Composition
- Special Design Compression Pad
- Leak Proof Sealing
- Compact Design
- Better Corrosion Resistance
- Shipped in Factory Charged Condition
- Weather Proof cells



Application:

Telecom - MaxLife VRLA batteries are used predominantly in Telecom, Power substation, UPS systems, Data centers and Railways. Our batteries power more than 50,000 sites in one of the most demanding telecom markets globally with varied grid conditions. Our batteries are specially designed to ensure hassle free handling and maintenance-free operation, to offer space economy and provide an eco-friendly solution. The batteries are designed for remarkable performance, supplied in factory charged condition with modules in ready to use state appropriate for use in Telecom.

UPS / Data center - The company has been a leader in UPS segment for 15 years by providing batteries designed for high quality performance to try and achieve zero down time, our batteries provide reliable performance for long lasting period . These batteries do not require periodic topping up of water and are best suited for applications where back up requirement is in range of 30 mins to 1 hour and can withstand tough environmental conditions.

Railways – NED Energy Limited prides itself in providing energy storage solutions to the Indian Railways by providing uninterrupted power back up support. Railway Signalling is a complex arrangement and the most important aspect of the entire scheme is providing continuous power supply to the signalling equipment with robust and reliable power back up. Battery is an integral part of the signalling infrastructure to keep the signalling system operational. For this application batteries are installed in challenging and remote environmental conditions next to railway tracks in hot and humid conditions, exposed to dust and vibrations.

Power and Infrastructure – Our batteries have become synonymous with reliability and are the first choice in power plants, sub-stations and core industries, where reliable standby power is absolutely essential for critical operations. These batteries have excellent discharge capabilities and are ideal for frequent charge / discharge cycles and have low self discharge making it ideal to be used in applications like Power, Substation, Cement, Steel and Oil & Gas sectors



MAXPRO

SMF VRLA Batteries for UPS Applications



Huge demand for UPS systems in India has increased drastically over the years especially in service based sectors like Banking and insurance, health care, IT and hospitality. This in turn has led to large scale computerization and need for power back up or Uninterrupted Power Supply (UPS) systems.

NED manufactures revolutionary and specialized battery for UPS application to withstand huge loads; the batteries have a unique grid design which enhances high rate discharge performance, life cycle and deep discharge recovery. These batteries are a natural choice where ambient temperature is not very high.

Design and Construction Features

- Proprietary Positive Grid Alloy
- Proprietary Positive Paste Composition
- Long Shelf Life above 6 Months
- Deep Discharge Recovery even after 7 days
- Fast Charging Capability Within 6-8 hours
- Superior High rate Performance at 5 to 60 Minute rate of Discharge



PRODUCT SPECIFICATIONS

Model	Nominal Voltage	Rated Capacity @ C20 at 27°C (10.50 EBV)	Dimensions (mm)		
			Length (± 5mm)	Width (± 5mm)	Height (± 5mm)
MAXPRO4212	12	42	198	167	172
MAXPRO6512	12	65	350	167	174
MAXPRO8012	12	80	330	172	223
MAXPRO10012	12	100	330	172	223
MAXPRO12012	12	120	407	173	240
MAXPRO15012	12	150	520	240	222
MAXPRO20012	12	200	520	240	222

*Also Available in 75Ah & 90Ah

Electrolyte	Immobilized H ₂ SO ₄
Positive Plate Alloy	"Arsenic and Cadmium Free Pb-Ca-Sn Alloy"
Positive Plate Type	Flat Pasted
Type of Connection	Bolted
Type of Separator material	Absorptive Glass Mat
Container Material	"ABS"
Recommended charging method	Constant Potential
Shelf life at 27°C.	6 Months
Self discharge	<1% per week
Float Charge Voltage	13.5V - 13.62V
Boost Charge Voltage	13.8V - 14V
Charging Time from 20% SOC to 90% SOC	6-8 Hrs
Operating Temperature Range	"0°C to 50°C"
Design Life at 27°C	10 Years
Cyclic Service Life (@ 27°C)	
At 20% D.O.D	1400 Cycles
At 50% D.O.D	650 Cycles
At 80% D.O.D	300 Cycles
Product Performance Conforms to	JIS C 8702

"Towards a Green Life hub"



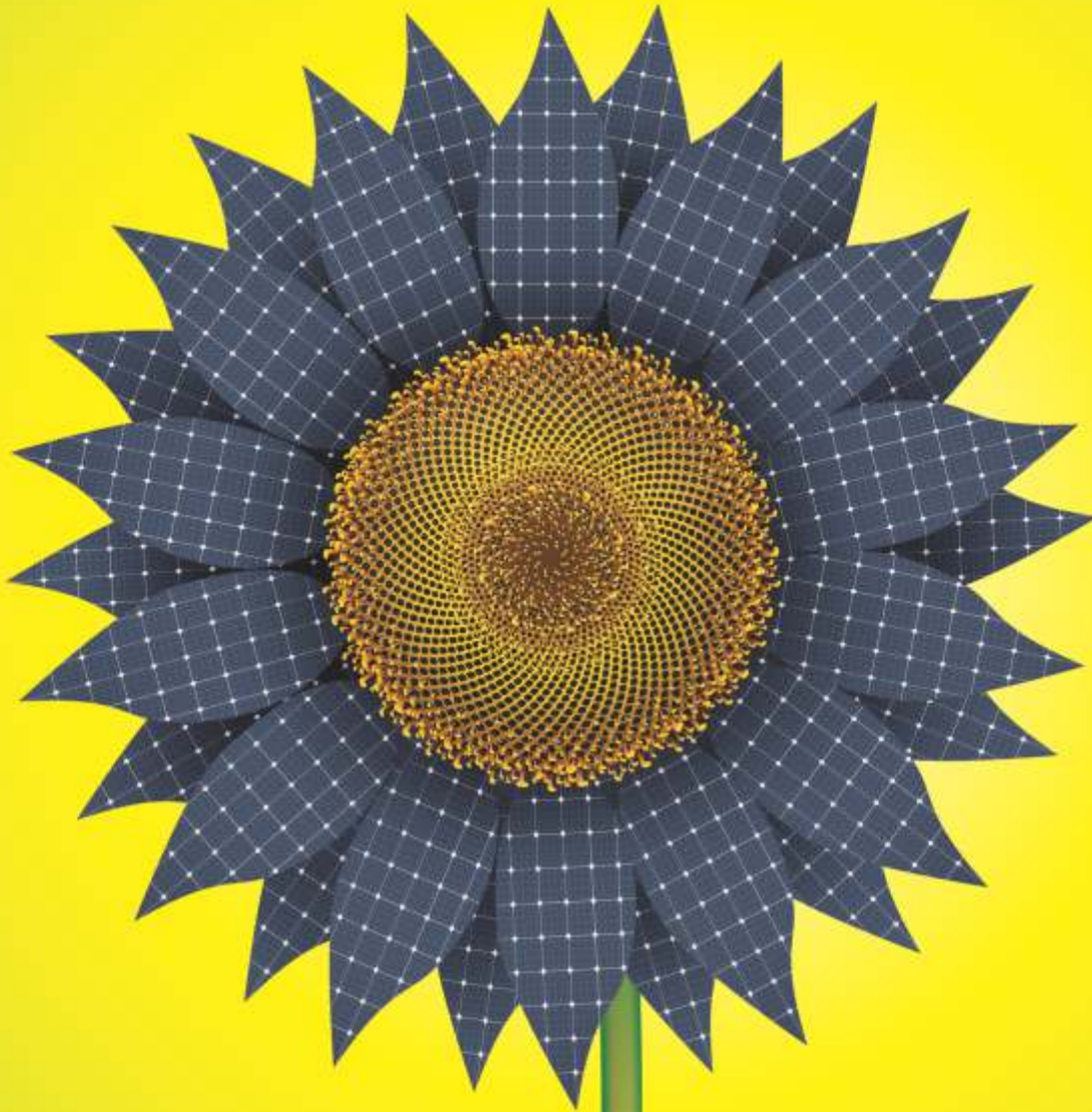
Specialized Batteries For
Solar Application


SUN QUALITA

MAX QUALITA



INNOVATING ALWAYS



SOLAR BATTERIES

Using Patented Technology

Superior Cyclic Life
Suitable for Xtreme Temperature
Highest ROI with Lowest TCO

Robust | Reliable | Recyclable

Low Carbon Footprint



12V TG VRLA BATTERY

FEATURES

- Tubular Positive plates for Long Life
- Synthetic Separator for Long life at High Temperature
- Improved Gel Formula for Better performance at Extreme Operating conditions
- Specially designed for Solar application

BENEFITS

- Easy to Install
- Shipped in 100% Charged Condition
- Zero Maintenance
- MNRE Approved
- Shelf Life of above 12 Months at 27°C
- Performance Conforms to IEC 61427, IS 15549
- Available with Additional components like IP-55 Cabinets Remote monitoring Etc...

CONSTRUCTIONAL DETAILS

Positive Plate	Tubular
Negative Plate	Flat Pasted
Separator	SYNTHETIC & AGM
Container and Cover	PPCP & ABS
Terminals	Bolted type with metal inserts
Electrolyte	Immobilized Gel

PERFORMANCE SPECIFICATIONS

Design Float Life	10 Years
Cycle Life @ 27°C	@20% DOD: 4000 Cycles @50% DOD: 2500 Cycles @80% DOD: 1500 Cycles
Self discharge	<2% per Month @ 27°C
Shelf Life	12 Months @ 27°C
Operating Conditions	-20°C to +55°C
Float/Boost Voltage	2.30 to 2.35V / 2.35 to 2.4V/cell
(Constant Voltage)	with Current Limit 0.25 C10 Amps

GENERAL SPECIFICATIONS

Model	Nominal Voltage	Rated Capacity @ C10@27°C up to 10.5EBV	Dimensions		
			Length (±5mm)	Width (±5mm)	Height (±5mm)
SQ 12-40	12V	40	330	172	223
SQ 12-60	12V	60	407	173	240
SQ 12-80	12V	80	407	173	240
SQ 12-100	12V	100	520	240	222
SQ 12-120	12V	120	520	240	222
SQ 12-150	12V	150	503	200	395
SQ 12-200	12V	200	503	200	395



Improved VRLA batteries for cyclic & PSoC applications at high temperatures. Ideally suited for solar photovoltaic applications and outdoor telecom sites.



FEATURES	BENEFITS
<ul style="list-style-type: none"> Special grid alloy for both positive & negative plates Tubular positive plate & special additives for negative plate Unique combination separators Electrolyte in Gel form Robust design & construction 	<ul style="list-style-type: none"> Improved deep cyclic capability Enhances cyclic life under PSoC @ high operating temperatures Improves reliability during life by eliminating single cell failures due to internal shorts, etc during cycling Improves performance as well as thermal stability over a wide range of temperatures MNRE Approved

CONSTRUCTIONAL FEATURES	
Positive Plate	Tubular Plate
Negative Plate	Flat Pasted
Separator	Synthetic
Container & Cover	PPCP
Electrolyte	Sulphuric acid in Gel form
Safety valve	Pressure regulated explosion proof with flame arrester
Terminals	Bolted type with brass inserts
Recombination Eff.	99%

PERFORMANCE LEVELS	
Design Life	20 years @ 27°C
Cycle Life	6200 @ 20% DoD @ 27°C 3080 @ 50% DoD @ 27°C 2200 @ 80% DoD @ 27°C
Self discharge	<4% per month @ 27°C
Shelf Life	upto 12 months @ 27°C
Operating conditions	-20° C to + 55° C
Float voltage	2.27 V +/- 0.02V
Boost voltage	2.35 V +/- 0.02V
Charging method	Constant Potential
AH Efficiency	>95%
WH Efficiency	>85%

The Requirement of Battery for SPV application & suitability of lead acid batteries

Required Features	Tubular Gel VRLA	Hybrid Advanced VRLA	AGM VRLA	Low Maintenance Flooded Tubular
Low or No Maintenance	Good (+1)	Good (+1)	Good (+1)	Poor (-1)
Above 90% charging eff. at a low charging rate (<C30) & from 70% to 100% SOC	Good (+1)	Good (+1)	Average (0)	Poor (-1)
Resistance to abuses				
a) High Ambient Temp.	Good (+1)	Good (+1)	Poor (-1)	Poor (-1)
b) Life under prolonged PSoC	Good (+1)	Good (+1)	Poor (-1)	Poor (-1)
c) Good deep discharge Recovery	Good (+1)	Average (0)	Poor (-1)	Average (0)
Long cyclic life above 2000 cycles @ 20% DoD @ an avg. ambient temp. of 35°C under PSoC condition	Good (+1)	Average (0)	Poor (-1)	Average (0)
Low cost / cycle	Good (+1)	Average (0)	Poor (-1)	Average (0)
Total Rating	+ 7	+ 4	- 4	- 4

Poor = -1, Average= 0, Good= +1

The batteries comprise of Unique design, Unique processes which enhance high rate performance, cycle life & deep discharge recoveries when operating in PSoC conditions at extreme temperatures.



POWER BUILD BATTERIES PRIVATE LIMITED



About us :

Power Build Batteries Pvt. Ltd. was established in 1992. We are a leading manufacturer of Tubular Lead Acid Batteries and a certified ISO 9001:2015 & 14001:2015 organization. Power Build Batteries Pvt. Ltd., within a short span of time has earned a reputation in the stand-by power industry for its exceptional quality and prompt service.

Power Build is an APPROVED VENDOR for INDIAN RAILWAYS for Batteries for S&T application by RDSO and is a Part 1 supplier to Indian Railways.

Salient Features:

- ❖ Special Lead Alloy Encompass Virgin Active Materials
- ❖ Ultra Low Maintenance
- ❖ Quality and Reliability-Electrical and Chemical Lab
- ❖ Automated Pressure Die Casting Section
- ❖ Automated Pasting Machine
- ❖ Auto Controlled Electrodes Formation
- ❖ Auto Heat Sealing Assembly Line
- ❖ Own Engineering Solutions

Our Products Conform to :

IS 1651 : 2013
IS 13369 : 2012
IS 16270 : 2014
IRS : S : 88/2004

12V UPS/INVERTER TUBULAR BATTERIES

Model	Capacity @ C20	Dimensions		
		Length (± 5mm)	Width (± 5mm)	Height (± 5mm)
80 ST	80	410	175	255
100 ST	100	510	212	255
120 ST	120	510	212	255
130 ST	130	518	273	260
150 ST	150	518	273	294
100 ET	100	502	188	370
120 ET	120	502	188	420
150 ET	150	502	188	420
180 ET	180	502	188	420
200 ET	200	502	188	420



12V FLOODED TUBULAR BATTERIES FOR SOLAR APPLICATION

Model	Capacity @ C10	Dimensions		
		Length (± 5mm)	Width (± 5mm)	Height (± 5mm)
40 T	40	410	175	255
60 T	60	410	175	255
80 T	80	510	212	255
100 T	100	510	212	255
120 T	120	518	273	260
100 TT	100	502	188	420
120 TT	120	502	188	420
150 TT	150	502	188	420
180 TT	180	502	188	420
200 TT	200	502	188	420



2V STATIONARY CELLS IN HR CONTAINER FOR RAILWAYS S & T APPLICATION

Model	Capacity @ C10	Dimensions		
		Length (± 5mm)	Width (± 5mm)	Height (± 5mm)
T40H-LM	40	95	169	265
T80H-LM	80	115	169	335
T120H-LM	120	171	141	365
200H-LM	200	215	185	475
T300H-LM	300	215	185	475
T400H-LM	400	260	210	425
T500H-LM	500	260	210	475
T600H-LM	600	260	210	475



2V STATIONARY CELLS IN PP CONTAINER FOR SOLAR & TELECOM APPLICATION

Model	Capacity @ C10	Dimenisons		
		Length (± 5mm)	Width (± 5mm)	Height (± 5mm)
T200P-LM	200	170	150	425
T300P-LM	300	170	150	425
T400P-LM	400	215	173	415
T450P-LM	450	215	173	415
T500P-LM	500	215	173	415
T600P-LM	600	282	180	455
T800P-LM	800	390	175	500
T1000P-LM	1000	415	173	520
T1200P-LM	1200	415	173	520



OUR GLOBAL PRESENCE



PAN INDIA PRESENCE



MANUFACTURING UNITS:

NED
ENERGY LIMITED



POWER BUILD BATTERIES PRIVATE LIMITED

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*Technical Parameters are Subject to Change due to Continuous improvements and R&D



LEAD - RETURN - RECYCLE

PROTECT THE ENVIRONMENT, RECYCLE LEAD ACID BATTERIES AT AN APPROVED RECYCLING FACILITY
AND DO NOT DISPOSE THE BATTERIES TO UNAUTHORIZED AGENCIES.

PLEASE REFER TO "CPCB" WEBSITE FOR THE CURRENT APPROVED LIST OF AUTHORIZED LEAD SMELTERS.