

SOLARTECH - Batteries (Flooded LMLA)

MICROTEX
Since 1969

Capacities from 100 to 1100 Ampere-Hours
In 2volts cells and 12volts Battery range



Microtex is a leading manufacturer of Industrial Batteries in Bangalore, India. The factory has a covered area of 26700 Sq ft on 5 acres of land, with 300 trained people. Established 50 years ago it is a company well known for its high quality. Microtex produces in house, the specially designed lead alloys, lead oxides, grid castings, pasted plates, injection molded containers, multi-tubular gauntlets, separators and produces the complete battery using state of the art industry standard battery making machinery. The Company started producing Industrial Batteries in the seventies for applications like Traction, Stationary and Rail road Batteries.

Microtex offers Low Maintenance tubular plate Standby-Power cells – LMLA series in Hard Rubber and PPCP heat sealed containers capacities ranging from 40Ah to 1000Ah. These flooded cells / batteries are specially designed to provide superior performance in partial state of charge (PSOC) and to withstand daily charge – discharge cycle. These cells / batteries are manufactured using state of the art techniques and quality components, materials for reduced maintenance and extended battery life.

For Solar, Nuclear Power plants, Electric Power Generation facilities, Petrochemical plants, Switchgear and control applications, Wind, hydro & solar photovoltaic, Large UPS Systems, Railway signaling, Telecommunications.

Advantages of using standby LMLA Flooded Cells/Batteries.

FEATURES

Special alloy thicker spines for Positive Tubular plates

High Impact PPCP Containers
Special Lead-alloy terminal posts

Factory Pre-charged cells/batteries
(Unless specified by customer)
Heavy Duty excellent reserve capacity
High Charge Efficiency

Short Type, Jumbo Type & Tall Type in
12 volts design (Flooded)

Charging Specification

ADVANTAGES

Cast at 150 bar ensures better compression and packing of lead ensuring long cycle life
In 2 volts and 12volts range
Provide better conductivity and tighter Connections requiring less maintenance
Ready to Install and use.
Reliable performance saves money and time for users.
can sustain partial state of charge up to six months
Ampere hour efficiency in excess of 90%
Watt hour efficiency in excess of 80%
Occupies less floor space, robust aesthetics

Solar Photo Voltaic Applications

On / Off Type

Over Voltage Disconnect : 2.370±0.005 V/Cell at 25 °C
Array Reconnection Voltage : 2.250±0.005 V / Cell at 25° C
Low Voltage Disconnect : 1.850±0.005 V / Cell at 25° C
Load Reconnect Voltage : 2.080±0.005 V / Cell at 25°C

Pulse Width modulation (CV Controller) Type

Regulation Voltage : 2.350±0.005 V / Cell at 25° C
Low Voltage Disconnect : 1.850±0.005 V / Cell at 25° C
Load Reconnection Voltage : 2.080±0.005 V / Cell at 25° C

Telecom and Other Applications

Float Applications

Float Voltage : 2.250±0.005 V /cell at 25°C
Boost Voltage : 2.300±0.005 V /cell at 25°C
Equalizing charge : 2.35±0.005 V/cell at 25°C
Current limit : 0.1 C₁₀ Amps (Min.)
to 0.2 C₁₀ Amps (Max.)
Ripple : Should be less than 3% RMS
Float to boost change over : Battery charging current
is >5 % of C₁₀ Amps
Boost to Float change over : Battery charging current
is <3 % of C₁₀ Amps

Cyclic Applications

Float Voltage : 2.250±0.005 V / Cell at 25°C
Boost Voltage : 2.350±0.005 V /cell at 25°C
Equalizing charge : 2.37±0.005 V/cell at 25°C
Current limit : 0.1 C₁₀ Amps (Min.)
to 0.2 C₁₀ Amps (Max.)
Ripple : Should be less than 3% RMS
Float to boost change over : Battery charging current
is >5 % of C₁₀ Amps
Boost to Float change over : Battery charging current
is <3 % of C₁₀ Amps

Batteries comply with Standard IS 1651-1993, IS 13369-1992, IEC61427, IEC 60896-21 22 and BS 6290 Part IV
The company is ISO 9001:2015 and ISO 14001:2015 certified

2volts Flooded cells in Hard Rubber and PPCP container

TECHNICAL DATA - MICROTEX STATIONARY CELLS

Cell Type	Material of Container	Capacity in Ah at 27°C 10Hr	Capacity in Ah at 27°C 20Hr	Overall Dimension in mm			Cell Weight (appx.) Kgs.		Electrolyte Qty 1.200 Sp. Gr. (Appx.) in Litres	Charging Current			
				L +	W +	H +	Without Electrolyte	With Electrolyte		Initial Charging	Initial No. of Hrs.	Normal Charging	Equalizing Charging rate
				5 mm	5 mm	10 mm							
ST40H	HR	40	48	98	165	235	5.20	6.85	1.40	4.0	40	4	1.2
ST80H	HR	80	96	110	165	355	7.00	10.30	2.80	5.0	70	8	2.4
ST100H	HR	100	120	145	170	355	10.50	15.30	4.00	5.0	80	10	3.0
ST120H	HR	120	144	145	170	355	10.50	15.30	4.00	6.0	80	12	3.6
ST150H	HR	150	180	260	185	355	15.00	24.00	7.50	7.5	80	15	4.5
ST200H	HR	200	240	260	185	355	18.00	26.00	6.60	15.0	65	20	6.0
ST250H	HR	250	300	260	208	390	26.00	38.50	10.50	12.5	80	25	7.5
ST300H	HR	300	360	260	208	390	28.50	40.10	9.75	15.0	80	30	9.0
ST400H	HR	400	480	260	208	417	33.00	44.90	10.00	20.0	80	40	12.0
ST500H	HR	500	600	260	208	478	39.50	53.18	11.50	25.0	80	50	15.0
ST40P	PPCP	40	48	98	165	235	3.50	5.75	1.40	4.0	40	4	1.2
ST80P	PPCP	80	96	182	116	355	5.30	8.70	2.80	5.0	70	8	2.4
ST100P	PPCP	100	120	182	116	355	7.70	12.50	4.00	5.0	80	10	3.0
ST120P	PPCP	120	144	182	116	355	7.70	12.50	4.00	6.0	80	12	3.6
ST150P	PPCP	150	180	260	169	345	10.65	19.70	7.50	7.5	80	15	4.5
ST200P	PPCP	200	240	260	169	345	12.10	20.00	6.60	15.0	65	20	6.0
ST250P	PPCP	250	300	260	169	520	15.90	28.50	10.50	12.5	80	25	7.5
ST300P	PPCP	300	360	260	169	520	17.30	29.00	9.75	15.0	80	30	9.0
ST400P	PPCP	400	480	260	169	520	23.40	35.40	10.00	20.0	80	40	12.0
ST500P	PPCP	500	600	260	169	520	27.50	41.30	11.50	25.0	80	50	15.0
ST600P	PPCP	600	720	385	174	495	36.00	50.00	13.00	30.0	80	60	16.0
ST800P	PPCP	800	960	385	174	495	52.00	66.00	17.25	40.0	80	80	24.0
ST1000P	PPCP	1000	1200	415	172	515	60.00	82.50	18.00	50.0	80	100	30.0
ST1100P	PPCP	1100	1320	415	172	515	63.00	85.00	19.00	55.0	80	110	33.0

Note:
HR -Hard Rubber
PPCP- Poly Propylene Copolymer
All cells are supplied in dry un charged condition
The electrical characteristics are nominal indicative value and can vary within ±5.0%.
In case of cells/batteries in Dry and Uncharged condition the initial filling and charging is to be carried out as per the parameters mentioned in Technical data sheet

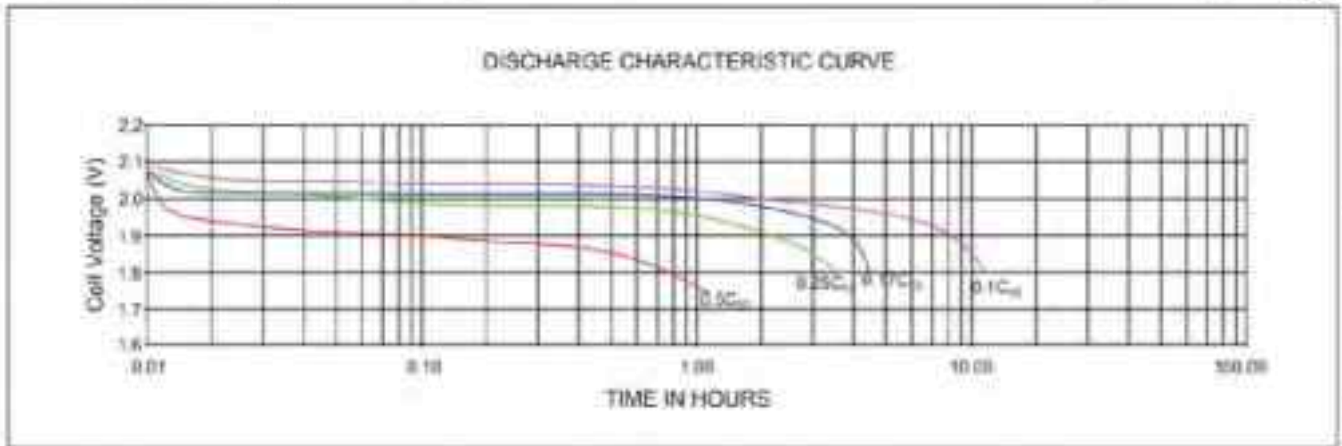
12volts Flooded batteries in PPCP Monoblock container

TECHNICAL DATA - MICROTEX STATIONARY BATTERIES

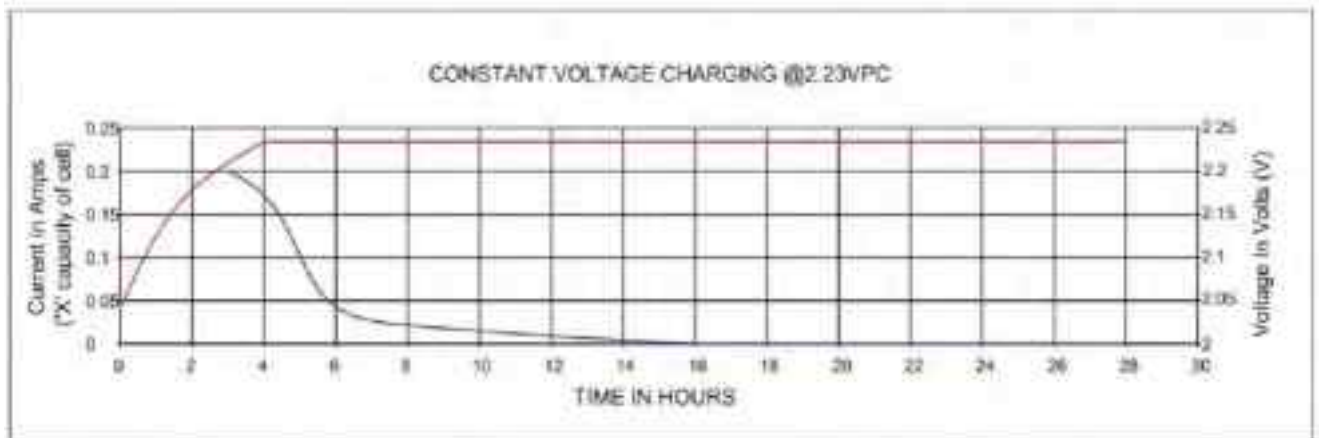
Cell Type	Material of Container	Capacity in Ah at 27°C 10Hr	Capacity in Ah at 27°C 20Hr	Overall Dimension in mm			Cell Weight (appx.) Kgs.		Electrolyte Qty 1.200 Sp. Gr. (Appx.) in Liters	Charging Current			
				L +	W +	H +	Without Electrolyte	With Electrolyte		Initial Charging	Initial No. of Hrs.	Normal Charging	Equalizing Charging rate
				5 mm	5 mm	10 mm							
SST 12V40P	PPCP	40	48	303	170	240	15.2	20.3	4.3	4	40	4	1.2
SST 12V60P	PPCP	60	72	410	173	245	21	27.3	5.3	5	50	6	1.8
SST 12V80P	PPCP	80	96	510	220	255	24	38.5	12.1	5	70	8	2.4
SST 12V100P	PPCP	100	120	510	220	255	33	42.6	8.0	5	80	10	3
STT 12V120P	PPCP	120	144	510	194	410	34.2	61.2	22.5	6	80	12	3.6
STT 12V130P	PPCP	130	156	510	194	410	37	62.8	25.8	6	85	13	3.9
STT 12V160P	PPCP	160	192	510	194	410	45.6	72	22.0	8	80	16	4.8
SJT 12V120P	PPCP	120	144	510	220	293	35.6	48.4	10.7	6	80	12	3.6
SJT 12V130P	PPCP	130	156	510	220	293	42.6	55.4	10.7	6	90	13	3.9
SJT 12V175P	PPCP	175	210	518	274	293	51	70	15.8	9	80	17.5	5.3

PPCP- Poly Propylene Copolymer
All cells and batteries are supplied in dry un charged condition
The electrical characteristics are nominal indicative value and can vary within ±5.0%.
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I. Discharge Characteristic Curve for Tubular Stationary Battery



II. Charging Curve for Tubular Stationary Battery



Battery racks:

Battery racks offered as per customer requirements either steel, Galvanized Iron(GI), Fibre Reinforced Plastic (FRP), Wood (Sal wood or Teak wood) painted with acid resistant paint.

The racks are of Single Tier - Single row/ Double row, Double Tier - Single row/ double row or stepped.

Battery racks for special applications supplied meet seismic qualification by Analysis /Testing

Manufactured by:

Microtex Energy P Ltd.

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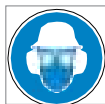
Read Instruction Manual



Completely recyclable



Hand over to authorised MOEF recyclers



Protect eyes from electrolyte



Electrical Hazard

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