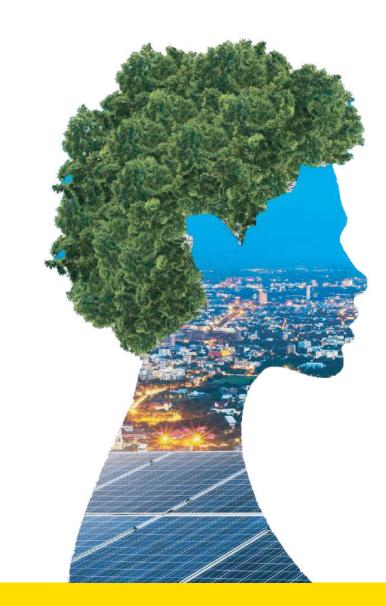




## **EASTMAN WORLD**

Welcome to Eastman World - Your Global Partner in Energy Solutions!





## TUBULAR BATTERIES

**MADE IN INDIA** 

## Eastman Introduction Founded in 2006

Established in 2006, Eastman Auto & Power Limited is a well-known name in the field of solar energy, energy storage, and power electronics, boasting a USD 420 million revenue and a dedicated workforce of over 3,000 professionals. Building on the group's decades-long success and maintaining the trust of our partners, Mr. Jagdish Rai Singal ventured into the future of energy with Eastman Auto & Power Limited.

Today, the business spans over 50 countries across Asia, the Middle East, Europe, Africa, the Caribbean, Central America, North America, and South America, providing the world with cutting-edge products that have set new benchmarks in their respective segments. With products reaching more than 100 countries, we are driven by innovation to continually set industry standards, ensuring uninterrupted power supply for residential, commercial, and industrial applications.





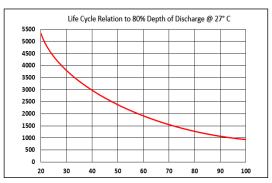


100Ah to 240Ah

#### MADE IN INDIA For Markets: ME, CIS, AF (Including Nigeria)

#### Overall Length:506±3.0 $\odot \odot \odot \odot$ 0 $\odot$ $^{(1)}$ $^{(1)}$ Ð Ð Ð $^{(1)}$ • 🏻 P Overall dth207±3.0 :405±3.0 **Dverall Height**

#### **Expected Life**



#### Introduction

Our Regular Series tall tubular batteries, designed for durability and performance. With robust tubular construction and highpressure die-cast spines, they offer minimal corrosion. Spill-proof vent plugs ensure a clean environment with low acid fumes.

Optimized negative paste allows fast charge acceptance, ensuring reliable power. Consistent backup, excellent PSOC performance and low self-discharge. Trust our batteries for resilient and efficient power solutions.

#### **Product Features**

- Robust Tubular with High Pressure diecasted spine- resulting low rate of spine corrosion.
- Spill Proof Vent plug resulting in no spillage on top and low controlled acid fumes.
- Optimized Negative paste receipt for fast charge acceptance
- Consistent backup throughout life
- Excellent behavior in PSOC condition as compare
- Low Self Discharge
- Excellent performance on deep cyclic application as compare to AGM VRLA
- Very High Design & Service Life
- Low Water Loss

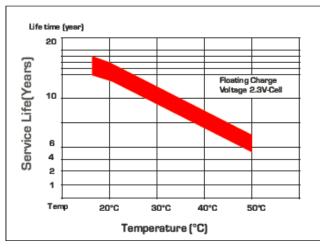
#### Applications

Energy Storage, Backup Purpose & Home Appliances

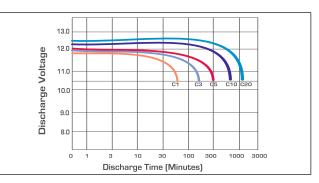
Model	EM-100	EM-150	EM-200	EM-220	EM-230	EM-240
Nominal Voltage	12	12	12	12	12	12
Rated Capacity	100	150	200	220	230	240
Length(±3mm)	506	506	506	506	506	506
Width(±3mm)	192	192	207	207	207	207
Height(±3mm)	405	405	405	405	405	405
Gross Battery Weight	50.3	56.6	67.6	68.5	68.5	72.5
Terminal Type	L	L	L	L	L	L
AH Efficiency	>90%	>90%	>90%	>90%	>90%	>90%

State of Charge	Specific Gravity	Voltage
100%	1.245-1.275	12.55V-12.70V
75%	<b>≤</b> 1.225	<b>≤</b> 12.4V
50%	<b>≤</b> 1.190	<b>≤</b> 12.1V
25%	<b>≤</b> 1.155	<b>≤</b> 12.0V
0%	1.120	11.8V

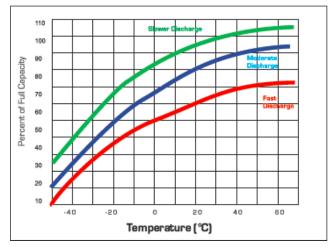
#### Service (Float) Life and Temperature



# Discharging Characteristics at various rates @ 27°C



#### **Expected Capacity vs Temperature**



IMS Integrated Management System Certified with TUV & APAVE India for Design & Manufacturing of Lead Acid Battery







#### Comparison in Between Eastman TTC & AGM VRLA

S.No	Parameter	Eastman Tall Tubular Conventional	AGM VRLA
1	Plate technology	Tall Tubular Plate	Flat Pasted Plate
2	Life W.R.T. Application	Excellent performance on cyclic application	Not good for deep cycle application
3	Application	Power Backup solution-solar/Inverter/UPS suitable for float application above 1 Hours discharge rate	Power Backup Inverter/UPS suitable for float application and Stand by application
4	Electrolyte	Free Flow Electrolyte	Electrolyte in Between AGM
5	Water Loss	Low	Negligible
6	Water Top up	Low Water Top	No water Top up required
7	Life Extension	Long life with regular water top up	Not Applicable
8	Self Discharge	Low < 3.0%	Very Low < 2.0%
9	Life Cycle w.r.t. 80% DOD@27°C	1300 cycles	450 Cycles
10	Recovery in PSOC	Excellent	Low
11	Charger Setting	Generic set point for charger	Required special set point for chargers
12	Operating Temperature Range	- 20 Degrees to + 55 Degree	- 15 Degrees to + 40 Degree
13	Terminal type	L- Type Terminal	Stud Type Terminal

Vent Plug Type : M22 Coin Type

#### **Terminal Configuration:-**

Terminal Type:- L Terminal Height :- 24mm Torque Value :- 8-10 N.m Bolt Type:-M8







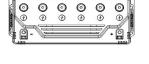


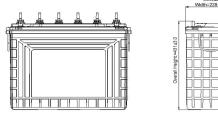




150Ah to 400Ah

#### MADE IN INDIA For Markets: ME, CIS, AF (Including Nigeria)



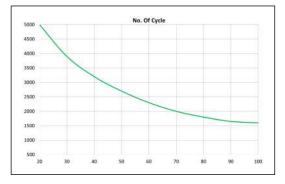


Eastman

DIAMOND

EM400D

#### **Expected Life**



#### Introduction

Our Diamond Series tall tubular batteries, engineered for unmatched reliability and performance. With robust tubular design and high-pressure die-cast spines, they ensure minimal corrosion. Spill-proof vent plugs prevent spillage and minimize acid fumes, maintaining a clean environment.

Optimized negative paste allows fast charge acceptance, ensuring consistent backup. These batteries excel in PSOC conditions, feature low self-discharge, and offer superior performance in deep cyclic applications. Trust the Diamond Series for reliable power solutions in every scenario.

#### **Product Features**

- Robust Tubular with High Pressure diecasted spine- resulting low rate of spine corrosion.
- Spill Proof Vent plug resulting in no spillage on top and low controlled acid fumes.
- Optimized Negative paste receipt for fast charge acceptance
- Consistent backup throughout life
- Excellent behavior in PSOC condition as compare
- Low Self Discharge
- Excellent performance on deep cyclic application as compare to AGM VRLA
- Very High Design & Service Life
- Low Water Loss

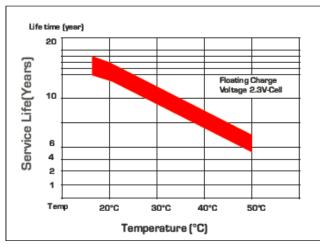
#### Applications

Energy Storage, Backup Purpose & Home Appliances

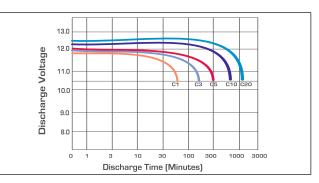
Model	EM-150D	EM-160D	EM-240D	EM 270D	EM-300D	EM 400D
Nominal Voltage	12	12	12	12	12	12
Rated Capacity	150	160	240	270	300	400
Length(±3mm)	506	506	506	506	506	560
Width(±3mm)	192	192	207	207	207	228
Height(±3mm)	405	405	405	405	405	431
Gross Battery Weight	57.8	57.8	75.2	75.3	80.7	107.8
Terminal Type	L	L	L	L	L	L
AH Efficiency	>90%	>90%	>90%	>90%	>90%	>90%

State of Charge	Specific Gravity	Voltage
100%	1.245-1.275	12.55V-12.70V
75%	<b>≤</b> 1.225	<b>≤</b> 12.4V
50%	<b>≤</b> 1.190	<b>≤</b> 12.1V
25%	<b>≤</b> 1.155	<b>≤</b> 12.0V
0%	1.120	11.8V

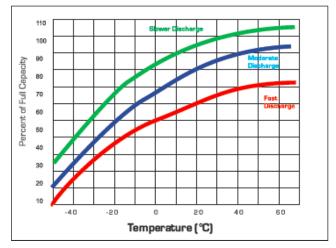
#### Service (Float) Life and Temperature



# Discharging Characteristics at various rates @ 27°C



#### **Expected Capacity vs Temperature**



IMS Integrated Management System Certified with TUV & APAVE India for Design & Manufacturing of Lead Acid Battery







#### **Comparison in Between Eastman TTC & AGM VRLA**

S.No	Parameter	Eastman Tall Tubular Conventional	AGM VRLA
1	Plate technology	Tall Tubular Plate	Flat Pasted Plate
2	Life W.R.T. Application	Excellent performance on cyclic application	Not good for deep cycle application
3	Application	Power Backup solution-solar/Inverter/UPS suitable for float application above 1 Hours discharge rate	Power Backup Inverter/UPS suitable for float application and Stand by application
4	Electrolyte	Free Flow Electrolyte	Electrolyte in Between AGM
5	Water Loss	Low	Negligible
6	Water Top up	Low Water Top	No water Top up required
7	Life Extension	Long life with regular water top up	Not Applicable
8	Self Discharge	Low < 3.0%	Very Low < 2.0%
9	Life Cycle w.r.t. 80% DOD@27°C	1800 cycles	1200 Cycles
10	Recovery in PSOC	Excellent	Low
11	Charger Setting	Generic set point for charger	Required special set point for chargers
12	Operating Temperature Range	- 20 Degrees to + 55 Degree	- 15 Degrees to + 40 Degree
13	Terminal type	L- Type Terminal	Stud Type Terminal

#### **Terminal Configuration:-**

Terminal Type:- L Terminal Height :- 24mm Torque Value :- 8-10 N.m Bolt Type:-M8



#### Vent Plug Type : M55 Coin Type





#### 200Ah

#### MADE IN INDIA For Markets: ME, CIS, AF (Including Nigeria)

#### Introduction

Our Smart Series tall tubular batteries, engineered for reliability and efficiency. With a robust tubular design and spill-proof vent plugs, they ensure durability and safety. Their optimized negative paste allows fast charge acceptance, providing consistent backup throughout their long service life.

With minimal water loss and low self-discharge rates, the Smart Series offers reliable power for critical applications. Trust the Smart Series for superior performance and longevity.

#### **Product Features**

- Delivers best quality of power equivalent to the grid power.
- PDC plates: Worry free superior performance with least battery maintenance.
- Tower type TT container, ensuring more than 20% extra electrolyte, ensuring lesser topping up frequency & better thermal management.
- More active surface area for better utilization of material, result in more backup.
- Excellent behavior in PSOC condition as compare.
- Ability to withstand long and frequent power outages.
- Excellent performance on deep cyclic application.
- Provided with 6 nos. free float indicators for ease of battery maintenance.
- Low water loss.

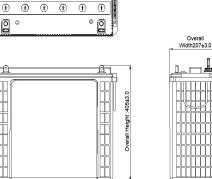
#### Applications

Energy Storage, Backup Purpose & Home Appliances

#### **PRODUCT SPECIFICATIONS**

Model	EM20OSS
Nominal Voltage	12
Rated Capacity	200
Length(±3mm)	506
Width(±3mm)	207
Height(±3mm)	405
Gross Battery Weight	64
Terminal Type	L
AH Efficiency	>90%





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EM200SS

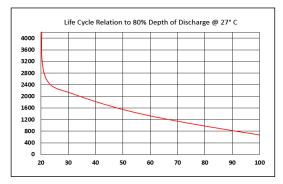
#### **Expected Life**

TUBULAR BATTERY FOR SOLAR USE

Overall Length:506±3.0

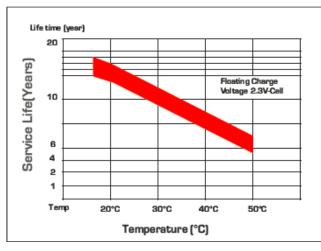
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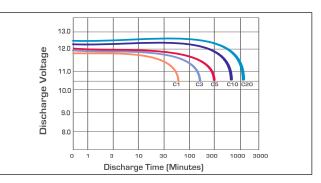


State of Charge	Specific Gravity	Voltage
100%	1.245-1.275	12.55V-12.70V
75%	<b>≤</b> 1.225	<b>≤</b> 12.4V
50%	<b>≤</b> 1.190	<b>≤</b> 12.1V
25%	<b>≤</b> 1.155	<b>≤</b> 12.0V
0%	1.120	11.8V

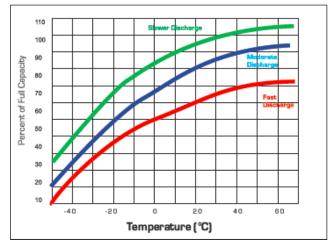
#### Service (Float) Life and Temperature



#### **Discharging Characteristics** at various rates @ 27°C



#### **Expected Capacity vs Temperature**



IMS Integrated Management System Certified with TUV & APAVE India for Design & Manufacturing of Lead Acid Battery

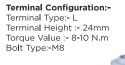
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### **Comparison in Between Eastman TTC & AGM VRLA**

S.No.	Parameter	Eastman Tall Tubular Conventional	AGM VRLA
1	Plate technology	Tall Tubular Plate	Flat Pasted Plate
2	Life W.R.T. Application	Excellent performance on cyclic application	Not good for deep cycle application
3	Application		"Power Backup Inverter/UPS suitable for float application and Stand by application"
4	Electrolyte	Free Flow Electrolyte	Electrolyte in Between AGM
5	Water Loss	Low	Negligible
6	Water Top up	Low Water Top	No water Top up required
7	Life Extension	Long life with regular water top up	Not Applicable
8	Self Discharge	Low < 3.0%	Very Low < 2.0%
0	Life Cycle w.r.t. 80% DOD@27 °C	800Cycle	400 Cycle
10	Recovery in PSOC	Excellent	Low
11	Charger Setting	Generic set point for cahrger	Required special set point for chargers
12	Operating Temperature Range	- 20 Degrees to + 55 Degree	- 15 Degrees to + 40 Degree
13	Terminal type	L- Type Terminal	Stud Type Terminal







Vent Plug Type : M55 Coin Type





#### 330Ah

#### PROLAST SERIES

MADE IN INDIA

For Markets: ME, CIS, AF (Including Nigeria)

#### Introduction

Our Prolast Series tall tubular batteries, engineered for high energy and efficiency. With a robust tubular design and spillproof vent plugs, they ensure durability and safety. Their optimized negative paste allows fast charge acceptance, providing consistent backup throughout their long service life.

With minimal Water loss, High Power and Low self-discharge rates, the Prolast Series offers higher power for critical applications. Trust the Prolast Series for superior performance and longer backup.

#### **Product Features**

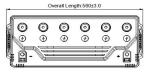
- Robust Tubular with High Pressure diecasted spine resulting low rate of spine corrosion.
- Spill Proof Vent Plug- Resulting in no spillage on Top and low controlled acid fumes.
- Optimized Negative paste receipt for fast charge acceptance.
- Consistent backup throughout life.
- Excellent behavior in PSOC condition as compare.
- Low Self Discharge.
- Excellent performance on deep cyclic application.
- Very High Design & Service Life.
- Low water loss.

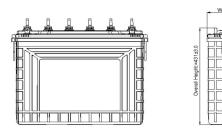
#### Applications

Energy Storage, Backup Purpose & Home Appliances

#### **PRODUCT SPECIFICATIONS**

Model	EM330PL
Nominal Voltage	12
Rated Capacity	330
Length(±3mm)	560
Width(±3mm)	228
Height(±3mm)	431
Gross Battery Weight	92*
Terminal Type	L
AH Efficiency	>90%





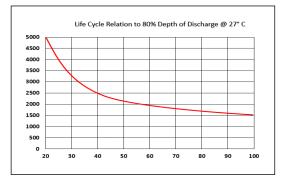
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Eastman

PROLAST

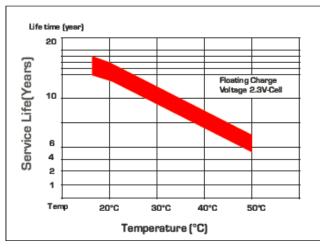
EM330 PL 12V-330Ah

#### **Expected Life**

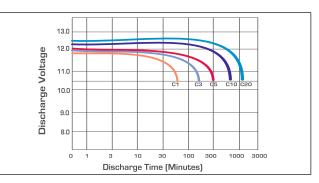


State of Charge	Specific Gravity	Voltage
100%	1.245-1.275	12.55V-12.70V
75%	<b>≤</b> 1.225	<b>≤</b> 12.4V
50%	<b>≤</b> 1.190	<b>≤</b> 12.1V
25%	<b>≤</b> 1.155	<b>≤</b> 12.0V
0%	1.120	11.8V

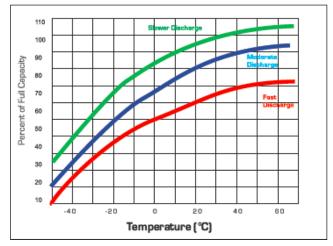
#### Service (Float) Life and Temperature



#### **Discharging Characteristics** at various rates @ 27°C



#### **Expected Capacity vs Temperature**



IMS Integrated Management System Certified with TUV & APAVE India for Design & Manufacturing of Lead Acid Battery







#### **Comparison in Between Eastman TTC & AGM VRLA**

S.No	Parameter	Eastman Tall Tubular Conventional	AGM VRLA
1	Plate technology	Tall Tubular Plate	Flat Pasted Plate
2	Life W.R.T. Application	Excellent performance on cyclic application	Not good for deep cycle application
3	Application	Power Backup solution-solar/Inverter/UPS suitable for float application above 1 Hours discharge rate	Power Backup Inverter/UPS suitable for float application and Stand by application
4	Electrolyte	Free Flow Electrolyte	Electrolyte in Between AGM
5	Water Loss	Low	Negligible
6	Water Top up	Low Water Top	No water Top up required
7	Life Extension	Long life with regular water top up	Not Applicable
8	Self Discharge	Low < 3.0%	Very Low < 2.0%
9	Life Cycle w.r.t. 80% DOD@27°C	1800 cycles	1000 Cycles
10	Recovery in PSOC	Excellent	Low
11	Charger Setting	Generic set point for charger	Required special set point for chargers
12	Operating Temperature Range	- 20 Degrees to + 55 Degree	- 15 Degrees to + 40 Degree
13	Terminal type	L- Type Terminal	Stud Type Terminal

#### **Terminal Configuration:-**

Terminal Type:- L Terminal Height :- 24mm Torque Value :- 8-10 N.m Bolt Type:-M8



Vent Plug Type : M55 Coin Type









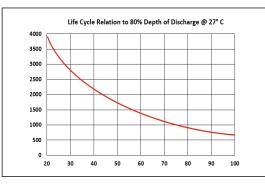
220Ah

MADE IN INDIA For Markets: Nigeria

#### 



#### **Expected Life**



#### Introduction

Our Dawn Series tall tubular batteries, with 5% extra capacity & backup, stunning performance, and new inbuilt terminal PDC, they ensure higher current carrying and low sulfation.

Featuring low water loss, extended service life, and the ability to withstand frequent outages, these batteries promise minimal maintenance costs and recovery from deep discharge. With superior thermal management and factory charging, they offer immediate use and long-lasting reliability.

#### **Product Features**

- 5% Extra Capacity & Backup w.r.t. Rated Capacity.
- Stunning performance, Stunning technology.
- New Inbuilt terminal PDC for higher current carrying & Low sulfation.
- Low Water Loss.
- Long battery service life with High back-up time.
- Ability to withstand long and frequent power outages.
- Big Size container design ensuring high acid level, ensuring minimum maintenance cost.
- Ability to recover from deep discharge.
- Have better thermal management.
- Factory charged Ready to use.

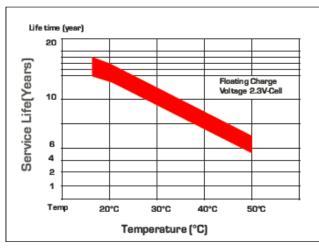
#### **Applications**

Energy Storage, Backup Purpose & Home Appliances

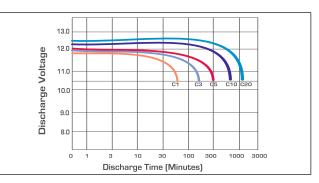
Model	EMDS220
Nominal Voltage	12
Rated Capacity	220
Length(±3mm)	506
Width(±3mm)	207
Height(±3mm)	405
Gross Battery Weight	64
Terminal Type	L
AH Efficiency	>90%

State of Charge	Specific Gravity	Voltage
100%	1.245-1.275	12.55V-12.70V
75%	<b>≤</b> 1.225	<b>≤</b> 12.4V
50%	<b>≤</b> 1.190	<b>≤</b> 12.1V
25%	<b>≤</b> 1.155	<b>≤</b> 12.0V
0%	1.120	11.8V

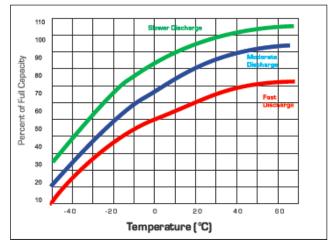
#### Service (Float) Life and Temperature



#### **Discharging Characteristics** at various rates @ 27°C



#### **Expected Capacity vs Temperature**



IMS Integrated Management System Certified with TUV & APAVE India for Design & Manufacturing of Lead Acid Battery





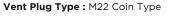


#### **Comparison in Between Eastman TTC & AGM VRLA**

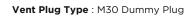
S.No	Parameter	Eastman Tall Tubular Conventional	AGM VRLA
1	Plate technology	Tall Tubular Plate	Flat Pasted Plate
2	Life W.R.T. Application	Excellent performance on cyclic application	Not good for deep cycle application
3	Application	Power Backup solution-solar/Inverter/UPS suitable for float application above 1 Hours discharge rate	Power Backup Inverter/UPS suitable for float application and Stand by application
4	Electrolyte	Free Flow Electrolyte	Electrolyte in Between AGM
5	Water Loss	Low	Negligible
6	Water Top up	Low Water Top	No water Top up required
7	Life Extension	Long life with regular water top up	Not Applicable
8	Self Discharge	Low < 3.0%	Very Low < 2.0%
9	Life Cycle w.r.t. 80% DOD@27°C	950 cycles	450 Cycles
10	Recovery in PSOC	Excellent	Low
11	Charger Setting	Generic set point for charger	Required special set point for chargers
12	Operating Temperature Range	- 20 Degrees to + 55 Degree	- 15 Degrees to + 40 Degree
13	Terminal type	L- Type Terminal	Stud Type Terminal

**Terminal Configuration:-**Terminal Type:- L Terminal Height :- 24mm Torque Value :- 8-10 N.m Bolt Type:-M8













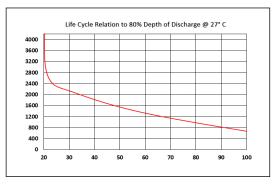
220Ah

MADE IN INDIA

For Markets: Nigeria

# Overall Length 5063.0 ○

#### **Expected Life**



## Introduction

Experience the ultimate power solution with our Duro Series tall tubular batteries. They are engineered to deliver more backup and efficiency, also provides the best quality of power equivalent to grid power.

With optimized negative paste and deep cyclic capabilities, these batteries offer long backup and longer service life. They can withstand long and frequent power outages, making them ideal for backup and critical applications.

Unlock extra performance, extra power, and extra backup with the Duro Series.

#### **Product Features**

- Delivers best quality of power equivalent to the grid power.
- PDC plates: Worry free superior performance with least battery maintenance
- Tower type TT container, ensuring more than 20% extra electrolyte, ensuring lesser topping up frequency & better thermal management
- More active surface area for better utilization of material, result in more backup.
- Excellent behavior in PSOC condition as compare.
- Ability to withstand long and frequent power outages.
- Excellent performance on deep cyclic application.
- Provided with 6 nos. free float indicators for ease of battery maintenance

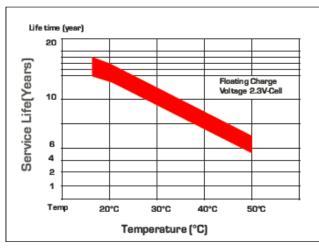
#### Applications

Energy Storage, Backup Purpose & Home Appliances

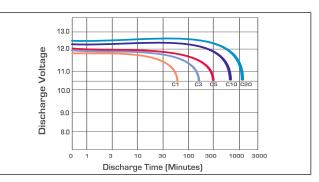
Model	EM22000
Nominal Voltage	12
Rated Capacity	220
Length(±3mm)	506
Width(±3mm)	207
Height(±3mm)	405
Gross Battery Weight	62
Terminal Type	L
AH Efficiency	>90%

State of Charge	Specific Gravity	Voltage
100%	1.245-1.275	12.55V-12.70V
75%	<b>≤</b> 1.225	<b>≤</b> 12.4V
50%	<b>≤</b> 1.190	<b>≤</b> 12.1V
25%	<b>≤</b> 1.155	<b>≤</b> 12.0V
0%	1.120	11.8V

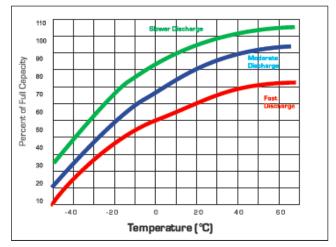
#### Service (Float) Life and Temperature



#### **Discharging Characteristics** at various rates @ 27°C



#### **Expected Capacity vs Temperature**



IMS Integrated Management System Certified with TUV & APAVE India for Design & Manufacturing of Lead Acid Battery





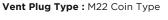


#### **Comparison in Between Eastman TTC & AGM VRLA**

S.No	Parameter	Eastman Tall Tubular Conventional	AGM VRLA
1	Plate technology	Tall Tubular Plate	Flat Pasted Plate
2	Life W.R.T. Application	Excellent performance on cyclic application	Not good for deep cycle application
3	Application	Power Backup solution-solar/Inverter/UPS suitable for float application above 1 Hours discharge rate	Power Backup Inverter/UPS suitable for float application and Stand by application
4	Electrolyte	Free Flow Electrolyte	Electrolyte in Between AGM
5	Water Loss	Low	Negligible
6	Water Top up	Low Water Top	No water Top up required
7	Life Extension	Long life with regular water top up	Not Applicable
8	Self Discharge	Low < 3.0%	Very Low < 2.0%
9	Life Cycle w.r.t. 80% DOD@27°C	950 cycles	580 Cycles
10	Recovery in PSOC	Excellent	Low
11	Charger Setting	Generic set point for charger	Required special set point for chargers
12	Operating Temperature Range	- 20 Degrees to + 55 Degree	- 15 Degrees to + 40 Degree
13	Terminal type	L- Type Terminal	Stud Type Terminal

**Terminal Configuration:-**Terminal Type:- L Terminal Height :- 24mm Torque Value :- 8-10 N.m Bolt Type:-M8









## PLATINUM SERIES

#### 220Ah

190

Power Gel Inside

445

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Life Cycle in Relation to Depth of Discharge @ 27° C

60% DOD

1500 No. of Cycle 40% DOD

2000

20% DOD

2500

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0

**Expected Life** 

120

op 40 of Capa 20 0

500

∆ 10

available 90

#### MADE IN INDIA For Markets: ME, CIS, AF (Including Nigeria)



Our batteries are designed for unparalleled reliability and performance. With gelled electrolyte technology, they prevent stratification and ensure consistent power without PSOC failure. Valve-regulated and maintenance-fr they require no water topup. Crafted from an antimony-free alloy, they boast low selfdischarge rates.

Offering superior design and service life compared to AGM VRLA batteries, they excel in cyclic and float applications. With a wide operating temperature range and robust tubular construction, they exhibit minimal corrosion for long-lasting durability.

#### **Product Features**

- Gelled electrolyte no stratification and no failure due to PSOC
- Valve regulated no water top up during service life
- Antimony free alloy Low Self Discharge
- Very High Design & service life as compare to than AGM VRLA
- Good for Cyclic & Float Applications
- Wide operating Temperature Range.
- Robust Tubular with High pressure diecasted spine rate of spine corrosion is very low as compare to AGM VRLA

#### Applications

Energy Storage, Backup Purpose & Home Appliances

#### **PRODUCT SPECIFICATIONS**

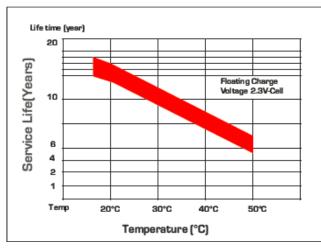
80% DOD

1000

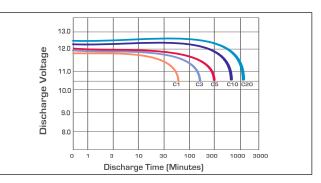
Model	EM200PT
Nominal Voltage	12
Rated Capacity	180
Length(±3mm)	445
Width(±3mm)	190
Height(±3mm)	406
Gross Battery Weight	64.3
Terminal Type	L
AH Efficiency	>96%

State of Charge	Specific Gravity	Voltage
100%	1.245-1.275	12.55V-12.70V
75%	<b>≤</b> 1.225	<b>≤</b> 12.4V
50%	<b>≤</b> 1.190	<b>≤</b> 12.1V
25%	<b>≤</b> 1.155	<b>≤</b> 12.0V
0%	1.120	11.8V

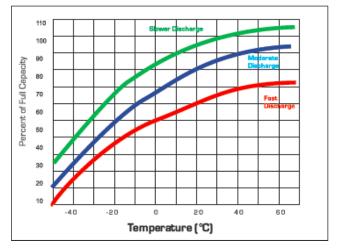
#### Service (Float) Life and Temperature



#### **Discharging Characteristics** at various rates @ 27°C



#### **Expected Capacity vs Temperature**



IMS Integrated Management System Certified with TUV & APAVE India for Design & Manufacturing of Lead Acid Battery

01:2015 Ce







#### Comparison in between Eastman Tubular Gel & AGM Gel VRLA

S.No	Parameter	Eastman Tubular Gel	AGM VRLA
1	Plate Technology	Tall Tubular Plate	Flat Pasted Plate
2	Life w.r.t Application	Excellent performance on cyclic application	Not good for deep cycle application.
3	Application	"Power Backup Solution-Solar/Inverter/UPS	"Power Back up - Inverter/UPS
		Suitable for Float Application above 1 Hour discharge rate"	Good for float & stand by application"
4	Electrolyte	Electrolyte in- Between Gel	Electrolyte in- between AGM
5	Water Loss	Negligible	Negligible
6	Water Top up	No water top up throughout Warranty Life	No water top up throughout Warranty Life
7	Life Extension	Not Applicable	Not Applicable
8	Self Discharge	Very Low < 2.0%	Very Low < 2.0%
9	Life Cycle w.r.t DOD @27° C @ 80% DoD	1500 Cycle	450 Cycle
10	Spillage	Spill-proof	Spill-proof
11	Fumes	No	No
12	Recovery in PSOC	Excellent	Low
13	Charger Settings	Generic set point for chargers	Required special set point for chargers
14	Operating Temperature Range	`-20 Degrees to +55 Degrees	-15 Degrees to +40 Degrees
15	Terminal Type	L-Type Terminal	Stud Type Terminal

**Terminal Configuration :-**Terminal Type :- L Terminal Height :- 25 mm Torque Value :- 8-10 N.m Bolt Type :- M8



Vent Plug Type :-M18 with vent valve & flame arrestor assembly





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