

## SOLAR TUBULAR BATTERY



### **STECHKRAFT**



#### **Techkraft Industries**

Since the last two decades, Techkraft Industries has been into manufacturing of battery parts, especially battery plates. With the success in the manufacturing of battery plates, the process of expansion began. It led to Techkraft Industries manufacturing its own batteries. The batteries designed by Techkraft Industries are technology driven and till date, they have been keeping up with the technological advancements.



#### **Core Values**

Our core values form the working culture and behaviour for us at Techkraft. We prioritize the safety and quality of our products to deliver our clients with integrity. We build sustainable value by achieving business and personal goals with the help of the latest technology.

#### **Mission**



Our mission is to deliver world class products across different countries, to provide our clients a competitive advantage. we ensure that the quality of our products manufactured are up-todate with the latest technology and our systems are continuously enhanced.

#### **Vision**



We strive to create a synergy between technology, systems, quality of our product and people, so that we deliver our people with the best quality product.



## **STECHKRAFT**

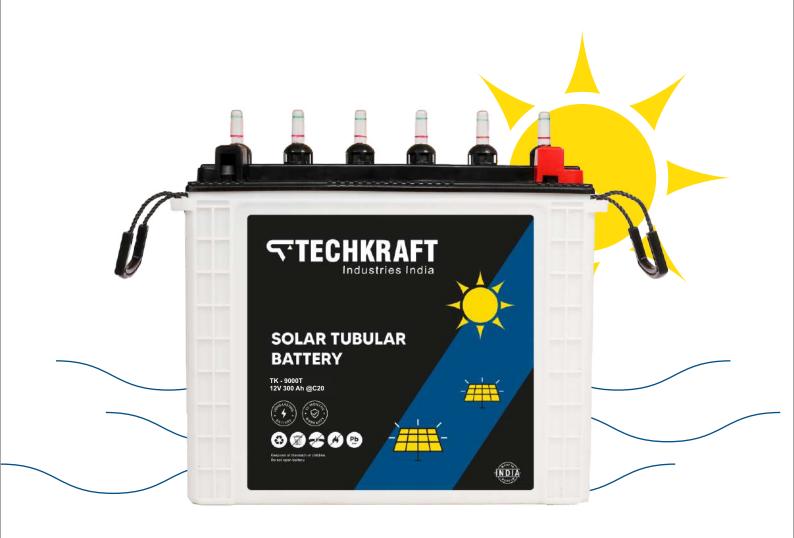




PARTICULARS & MODELS	TT100	TT150	TT180	TT200	TT240	TT270	TT300
Battery Type	TT100	TT150	TT180	TT200	TT240	TT270	TT300
Rated Capacity At 20 Hour Rate	100Ah	100Ah	180Ah	200Ah	240Ah	270Ah	300Ah
Battery Nominal Voltage	12V	12V	12V	12V	12V	12V	12V
Electrolyte Specific Gravity at 27°C	1.250±0.010	1.250±0.010	1.250	1.250±0.010	1.250±0.010	1.250±0.010	1.250
Packed Weight (±3%)	51kg.	57kg.	61kg.	64kg.	67kg.	71kg.	75kg.
DIMENSIONS							
Length	503±3 mm	503±3 mr					
Width	189±2 mm	189±2 mr					
Height up to Terminal	354±3 mm	354±3 mr					
ELECTRICAL PERFORMANCE							
Capacity at 27°C							
20 Hour Rate to 10.80V	100.0Ah	150.0Ah	180.0Ah	200.0Ah	240.0Ah	270.0Ah	300.0Al
10 Hour Rate to 10.80V	88.0Ah	132.0Ah	158.5Ah	167.5Ah	211.0Ah	210.0Ah	264.0Al
5 Hour Rate to 10.80V	73.5Ah	110.0Ah	132.0Ah	139.5Ah	177.5Ah	163.0Ah	220.5Ah
3 Hour Rate to 10.80V	63.5Ah	95.0Ah	114.0Ah	120.0Ah	153.5Ah	150.5Ah	190.5Ah
1 Hour Rate to 10.80V	44.0Ah	66.0Ah	80.0Ah	84.0Ah	105.5Ah	97.5Ah	132.0Ah
% Loss of capacity on storage per month at 27°C	< 5.0%	< 5.0%	< 5.0%	< 5.0%	< 5.0%	< 5.0%	< 5.0%
% of Ampere-Hour-Efficiency	> 92.0%	> 92.0%	> 92.0%	> 92.0%	> 92.0%	> 92.0%	> 92.0%
% of Watt-Hour-Efficiency	>78.0%	>78.0%	>78.0%	>78.0%	>78.0%	>78.0%	>78.0%
BATTERY CHARGING							
Constant Voltage Charging (CV)							
Maximum Charging Current	20.0A	20.0A	20.0A	20.0A	20.0A	20.0A	20.0A
Cyclic Use	14.40±0.05V	14.40±0.05V		14.40±0.05V	14.40±0.05V	14.40±0.05V	14.40±0.0
FLoat Use	13.80±0.05V	13.80±0.05V	13.80±0.05V	13.80±0.05V	13.80±0.05V	13.80±0.05V	13.80±0.0
Cotant Current Charge (CC)							
Maximum Charging Current	10.0A	15.0A	17.0A	19.0A	21.0A	23.0A	25.0A
Battery Backup Hours	1:10	2:40	3:20	4:15	5:00	5:35	6:00

#### **Solar Tubular Batteries**

The Solar Tubular Batteries manufactured by Techkraft are way ahead in design and technology than other available options in the market. They integrate a solar cell with battery power storage. These rechargeable batteries have been developed specifically for use in photo voltaic systems. Its a next generation of tubular batteries designed specially to withstand long frequent power cuts and requiring very low maintenance with high performance.



Techkraft Industries Private Limited manufactures solar tubular batteries for a source of alternative energy. It overhauls all the problems that give rise to sudden power breaks and is a next generation designer battery with ultra low maintenance.

### **Application**



**UPS System** 



Solar Application



Telecommunications



Home / Office Power Backup Systems

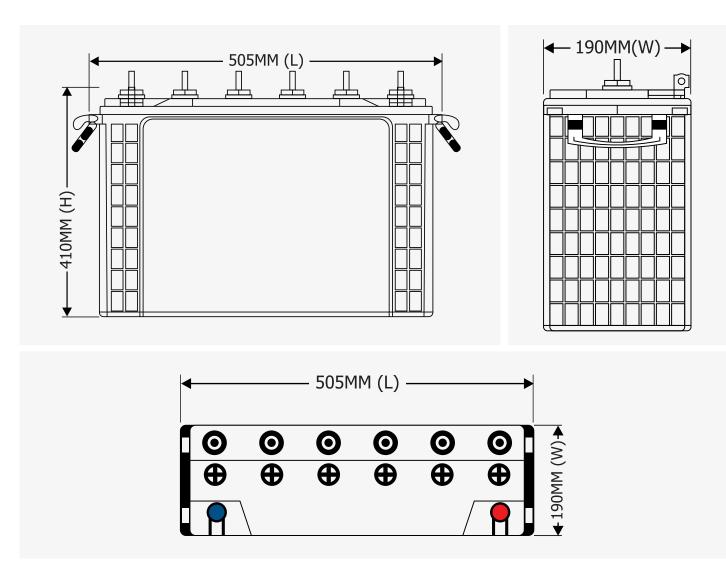


Fire & Security Systems

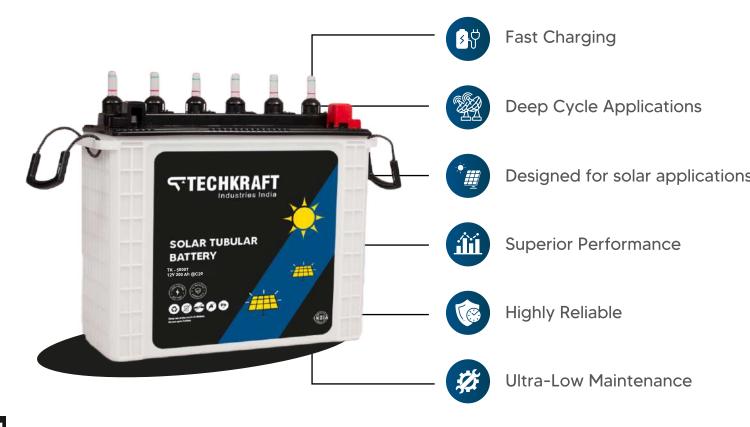


Home Inverters

#### **Solar Tubular Batteries - Dimensions**



#### **Solar Tubular Batteries - Features**

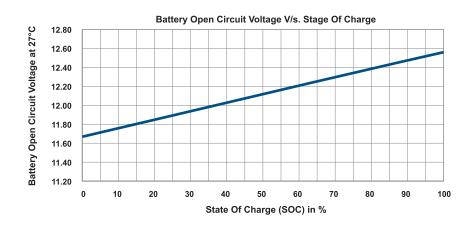




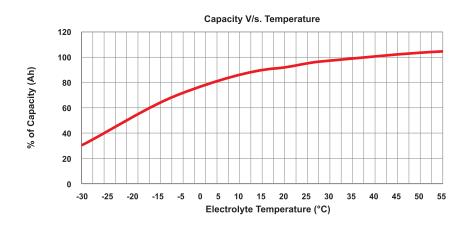


### **Technical Specifications**

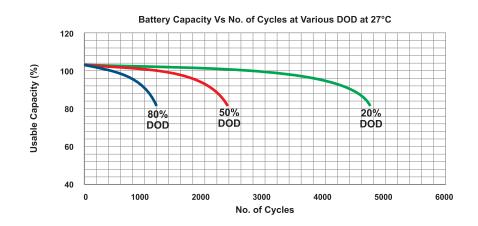
Battery State of Charge (SOC)



Battery Capacity v/s Temperature



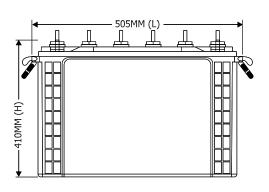
Battery Life Cycles Characterstics at 27°C

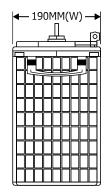




## Solar Tall Tubular Battery Model - 100TT

100Ah @C20 12V				
Battery Type Rated Capacity at Battery Nominal V Gross Weight (± 3%) Net Weight (± 3%)	oltage %)		TT100 100Ah 12V 51.00 KG 50.00 KG	
ELECTRICAL PERFORMANCE	Capacity at 27°C	20 Hour Rate to 10.80V 10 Hour Rate to 10.80V 5 Hour Rate to 10.80V 3 Hour Rate to 10.80V 1 Hour Rate to 10.80V	100.0 Ah 88.0 Ah 73.5 Ah 63.5 Ah 44.0 Ah	
	Self Discharged Per Month at 27 Precentage(%) of Ampere Hour I Precentage(%) of Watt Hour Effic	Efficiency	<4.0 >92.0% >78.0%	
BATTERY CHARGING	Deep discharged battery charged by Battery Charger	Current Time Acid Temperature	10 Amp 12 Hr <50°C	
	Deep discharged battery charged by Inverter	Current Time Acid Temperature	14 Amp 9 Hr <50°C	
	Freshning Charge with Battery Charger	Current Time Acid Temperature	10 Amp 6 Hr <50°C	





Recommended cut off voltage - 10.8V

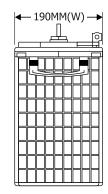
Recommended charging current for daily uses - 100 Ah - 10-14 Amp



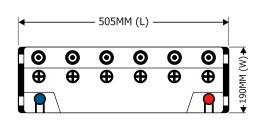
## Solar Tall Tubular Battery Model - 150TT

150Ah @C20 12V				
Battery Type Rated Capacity at Battery Nominal Vo Gross Weight (± 3%)	TT150 150Ah 12V 57.00 KG 55.70 KG			
ELECTRICAL PERFORMANCE	Capacity at 27°C	20 Hour Rate to 10.80V 10 Hour Rate to 10.80V 5 Hour Rate to 10.80V 3 Hour Rate to 10.80V 1 Hour Rate to 10.80V	150.0 Ah 120.0 Ah 100.0 Ah 85.0 Ah 60.0 Ah	
	Self Discharged Per Month at 27 Precentage(%) of Ampere Hour I Precentage(%) of Watt Hour Effic	Efficiency	<4.0 >92.0% >78.0%	
BATTERY CHARGING	Deep discharged battery charged by Battery Charger	Current Time Acid Temperature	12 Amp 14 Hr <50°C	
	Deep discharged battery charged by Inverter	Current Time Acid Temperature	14 Amp 12 Hr <50°C	
	Freshning Charge with Battery Charger	Current Time Acid Temperature	12 Amp 7 Hr <50°C	

# (H) MM (L) 505MM (L)



Recommended cut off voltage - 10.8V



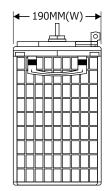
Recommended charging current for daily uses - 150 Ah - 12-16 Amp



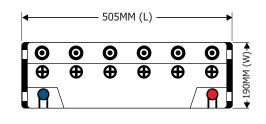
## Solar Tall Tubular Battery Model - 180TT

180Ah @C20 12V				
Battery Type Rated Capacity at a Battery Nominal Vo Gross Weight (± 3%)	TT180 180 Ah 12V 61.30 KG 60.20 KG			
ELECTRICAL PERFORMANCE	Capacity at 27°C	20 Hour Rate to 10.80V 10 Hour Rate to 10.80V 5 Hour Rate to 10.80V 3 Hour Rate to 10.80V 1 Hour Rate to 10.80V	180.0 Ah 158.0 Ah 132.0 Ah 114.0 Ah 80.0 Ah	
	Self Discharged Per Month at 27 Precentage(%) of Ampere Hour I Precentage(%) of Watt Hour Effic	Efficiency	<4.0 >92.0% >78.0%	
BATTERY CHARGING	Deep discharged battery charged by Battery Charger	Current Time Acid Temperature	14 Amp 16 Hr <50°C	
	Deep discharged battery charged by Inverter	Current Time Acid Temperature	14 Amp 16 Hr <50°C	
	Freshning Charge with Battery Charger	Current Time Acid Temperature	14 Amp 8 Hr <50°C	

## 205MM (F)







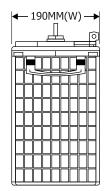
Recommended charging current for daily uses -200 Ah - 14-18 Amp



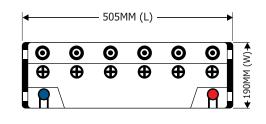
## Solar Tall Tubular Battery Model - 200TT

200Ah @C20 12V				
Battery Type Rated Capacity at Battery Nominal Vo Gross Weight (± 3%)		TT200 200 Ah 12V 64.50 KG 63.20 KG		
ELECTRICAL PERFORMANCE	Capacity at 27°C	20 Hour Rate to 10.80V 10 Hour Rate to 10.80V 5 Hour Rate to 10.80V 3 Hour Rate to 10.80V 1 Hour Rate to 10.80V	200.0 Ah 175.0 Ah 145.0 Ah 125.0 Ah 90.0 Ah	
	Self Discharged Per Month at 27 Precentage(%) of Ampere Hour I Precentage(%) of Watt Hour Effic	Efficiency	<4.0 >92.0% >78.0%	
BATTERY CHARGING	Deep discharged battery charged by Battery Charger	Current Time Acid Temperature	14 Amp 16 Hr <50°C	
	Deep discharged battery charged by Inverter	Current Time Acid Temperature	14 Amp 16 Hr <50°C	
	Freshning Charge with Battery Charger	Current Time Acid Temperature	14 Amp 8 Hr <50°C	

# (H) MMM (L) 505MM (L)



#### Recommended cut off voltage - 10.8V



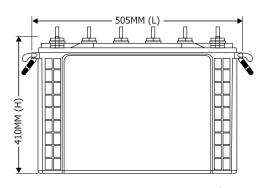
Recommended charging current for daily uses -200 Ah - 14-18 Amp

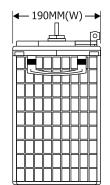


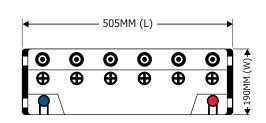
## Solar Tall Tubular Battery Model - 240TT

240Ah @C20 12V				
Battery Type Rated Capacity at Battery Nominal V Gross Weight (± 3%)	TT240 240 Ah 12V 67.30 KG 66.00 KG			
ELECTRICAL PERFORMANCE	Capacity at 27°C	20 Hour Rate to 10.80V 10 Hour Rate to 10.80V 5 Hour Rate to 10.80V 3 Hour Rate to 10.80V 1 Hour Rate to 10.80V	240.0 Ah 210.0 Ah 175.0 Ah 150.0 Ah 100.0 Ah	
	Self Discharged Per Month at 27 Precentage(%) of Ampere Hour I Precentage(%) of Watt Hour Effic	Efficiency	<4.0 >92.0% >78.0%	
BATTERY CHARGING	Deep discharged battery charged by Battery Charger	Current Time Acid Temperature	15 Amp 18 Hr <50°C	
	Deep discharged battery charged by Inverter	Current Time Acid Temperature	14 Amp 19 Hr <50°C	
	Freshning Charge with Battery Charger	Current Time Acid Temperature	15 Amp 9 Hr <50°C	

#### Recommended cut off voltage - 10.8V





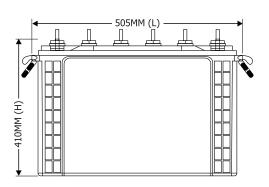


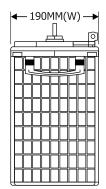
Recommended charging current for daily uses - 240 Ah - 16-22 Amp



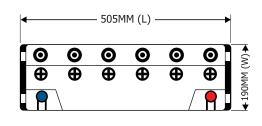
### Solar Tall Tubular Battery Model - 270TT

270Ah @C20 12V				
Battery Type Rated Capacity at a Battery Nominal Vo Gross Weight (± 3%) Net Weight (± 3%)	TT270 270 Ah 12V 71.30 KG 70.00 KG			
ELECTRICAL PERFORMANCE	Capacity at 27°C	20 Hour Rate to 10.80V 10 Hour Rate to 10.80V 5 Hour Rate to 10.80V 3 Hour Rate to 10.80V 1 Hour Rate to 10.80V	270.0 Ah 240.0 Ah 200.0 Ah 170.0 Ah 120.0 Ah	
	Self Discharged Per Month at 27° Precentage(%) of Ampere Hour E Precentage(%) of Watt Hour Effic	Efficiency	<4.0 >92.0% >78.0%	
BATTERY CHARGING	Deep discharged battery charged by Battery Charger	Current Time Acid Temperature	15 Amp 22 Hr <50°C	
	Deep discharged battery charged by Inverter	Current Time Acid Temperature	14 Amp 24 Hr <50°C	
	Freshning Charge with Battery Charger	Current Time Acid Temperature	15 Amp 10 Hr <50°C	









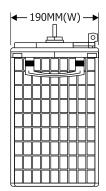
Recommended charging current for daily uses - 270 Ah - 18-24 Amp

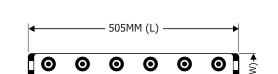


## Solar Tall Tubular Battery Model - 300TT

300Ah @C20 12V				
Battery Type Rated Capacity at Battery Nominal Vo Gross Weight (± 3%)		TT300 300 Ah 12V 75.50 KG 74.20 KG		
ELECTRICAL PERFORMANCE	Capacity at 27°C	20 Hour Rate to 10.80V 10 Hour Rate to 10.80V 5 Hour Rate to 10.80V 3 Hour Rate to 10.80V 1 Hour Rate to 10.80V	300.0 Ah 264.0 Ah 220.0 Ah 190.0 Ah 132.0 Ah	
	Self Discharged Per Month at 27' Precentage(%) of Ampere Hour E Precentage(%) of Watt Hour Effic	Efficiency	<4.0 >92.0% >78.0%	
BATTERY CHARGING	Deep discharged battery charged by Battery Charger	Current Time Acid Temperature	15 Amp 22 Hr <50°C	
	Deep discharged battery charged by Inverter	Current Time Acid Temperature	14 Amp 24 Hr <50°C	
	Freshning Charge with Battery Charger	Current Time Acid Temperature	15 Amp 10 Hr <50°C	

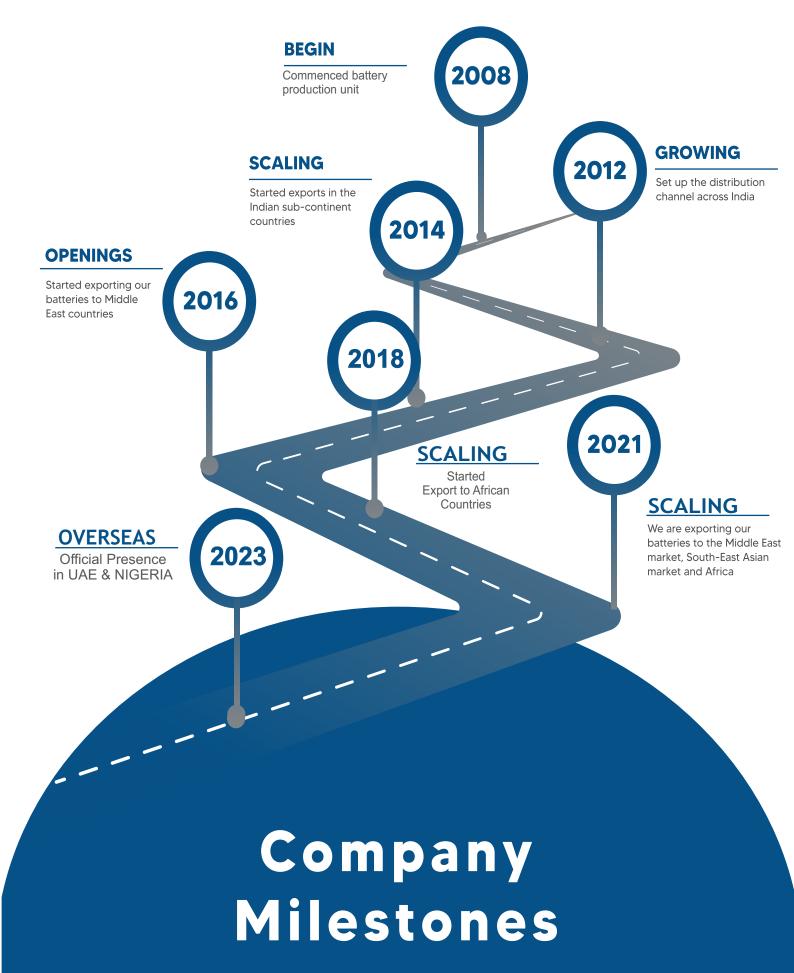
## (H) WM0 (H) 505MM (L)





Recommended cut off voltage - 10.8V

Recommended charging current for daily uses - 300 Ah - 18-24 Amp



For 15 years, Techkraft Industries has been taking baby steps towards entirely fabricated batteries. The sale of batteries started off slowly and gradually in the Indian Sub-Continent, that lead Techkraft to manufacture Solar Tubular Batteries, VRLA AGM Batteries, 2 Wheeler Batteries, Electric Vehicle Batteries and many more.

## STECHKRAFT Industries India

Website: www.techkraftindustries.com | Email: exports@techkraftindustries.com



#### CORPORATE OFFICE

2F-CS-037 ANSAL PLAZA VAISHALI, GHAZIABAD, UP INDIA.

Phone: +91-120-4180914 Mobile: +91 9958600424

#### **OVERSEAS OFFICE**

A2, 1FZA Business Park, Dubai Silicon Oasis, Dubai UAE Mobile: +971-542993175 18 Carter street, Lagos, Nigeria