



TALL TUBULAR BATTERY

PRODUCT DESCRIPTION

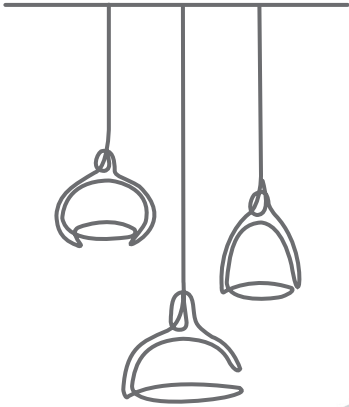
Tandhan Power Robust has 4 models of Tall Tubular batteries, namely TPTT115, TPTT150, TPTT200, & TPTT230. These next-generation tubular batteries are designed to work smoothly even in high cycle applications involving frequent and prolonged power outage.

PRODUCT FEATURES

- Resistant to Corrosion
- Improves Battery Life
- Lower Maintenance as Plates are Designed to Prevent Overheating
- Deep Discharge Recovery and Charge Acceptance Characteristics
- High Acid Volumes Help With Lower Maintenance

PRODUCT SPECIFICATIONS

BATTERY TYPE	NOMINAL VOLT	RATED CAP. Ah @ 27°C C20@1.75VPC	DIMENSIONS (IN MM) HXLXW ±5			GROSS WEIGHT (kg) ±5%	CONSTANT POTENTIAL LIMITING CURRENT AMP	TRICKLE CHARGE (CURRENT IN MA)	
			Height	Length	Width			Min	Max
TPTT115	12	115Ah	290	533	220	55	25	100	400
TPTT150		150Ah	421	500	187	58	32.5	130	520
TPTT200		200Ah				66	45	180	720
TPTT230		230Ah				68	50	200	800



TECHNICAL **DATA SHEET**

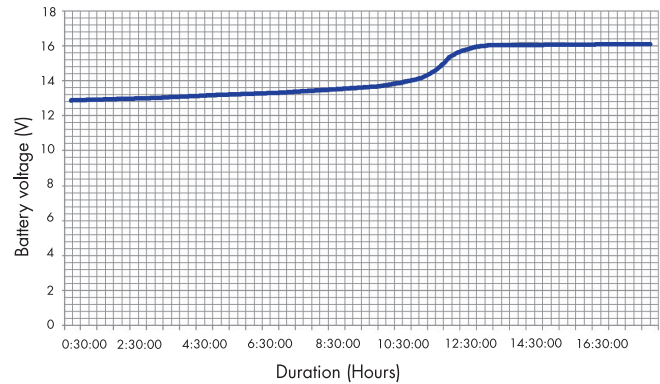
DESCRIPTION	FLOODED TYPE OF BATTERY			
Model	TPTT115	TPTT150	TPTT200	TPTT230
Capacity	115Ah	150Ah	200Ah	230Ah
Nominal Voltage	12Volt			
Declared C20 Capacity at 27 up to 1.75ECV	115	150	200	230
Manufacturer's Name	Tandhan Power			
Standard to which battery is manufactured	12V Flooded ranges meets IS13369			
Expected life of battery under normal O&M condition	Design life in ideal float condition 10 years			
Loss in capacity in 28days due to self discahrge	<1% per month (As per IS13369)			
Ampere hour Efficiency	>90%			
Watt hours Efficiency	>75%			
INITIAL CHARGING INSTRUCTIONS				
a) Filling in Specific Gravity	1.220±0.005 at 27°C			
b) Rest period	12hrs			
c) Constant potential limiting current	25Amps.	32.5Amps.	45Amps	50Amp.
d) Initial current input (12% of the rated output)	12A upto 2.35V	16A upto 2.35V	21.6upto 2.35V	24A upto 2.35V
e) Finishing current (6% of the rated output)	6A upto 2.75V	8.0A upto 2.75V	10.8A upto 2.75V	12A upto 2.75
f) Specific Gravity at fully charged condition	1.220±0.005 at 27°C			
g) Normal charging instructions	Recharging through inverter at constant potential mode of 14.4 with limited current as specified. After battery potential reaches 14.4V the battery should continue in trickle charge mode at constant potential of 13.5V			
TYPE OF PLATE				
Positive Plates	Robust tubular plates consisting of a lead antimony alloy, optimized for high corrosion resistance. Alloy: lead_Antimony(PbSb)			
Negative Plates	Grid plate construction cosisting of lead antimony alloy, Alloy, lead-Antimony (PbSb)			
Type of Electrolyte	Dilute H ₂ SO ₄			
Separators	Microporous & robust PE envelop, for electrical Separation of the positive & negative plates & optimized for low internal resistance			
Type of vent and filling Plugs	Microporous - Ceramic			
Material of Container & Cover	Polypropylene - Cermic			
Sealing Method	Heat Selaed			
Recommended Storage life of Battery (Dry Shelf Life)	6 Months			
Operation temp. range	'-20°C to +55°C			
OCV t 100% SOC	>12.5 Volt / Battery			
Allowable charging current	0.15C Charging			

NO. OF CHARGE-DISCHARGE CYCLE BATTERY CAN GIVE DURING ITS ENTIRE LIFE

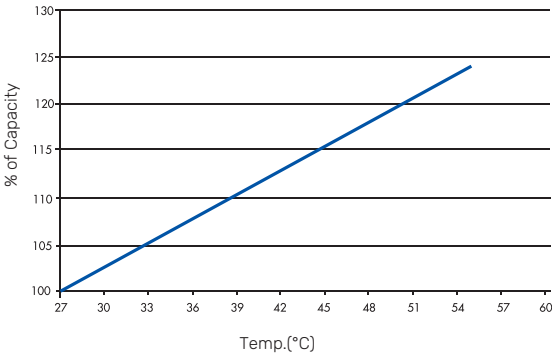
@20% DOD	5000 cycles
@50% DOD	2000 cycles
@80% DOD	1000 cycles

CHARACTERISTICS CURVES

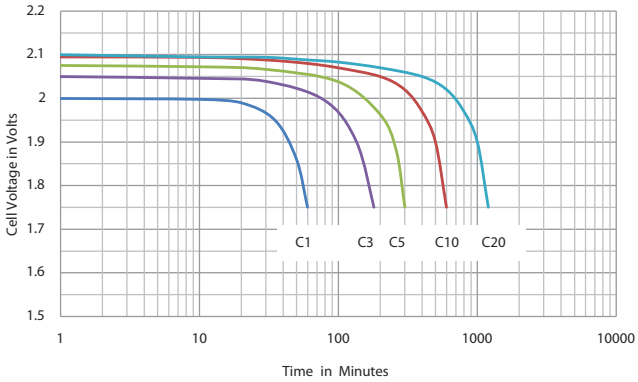
CHARGE CHARACTERISTIC GRAPH



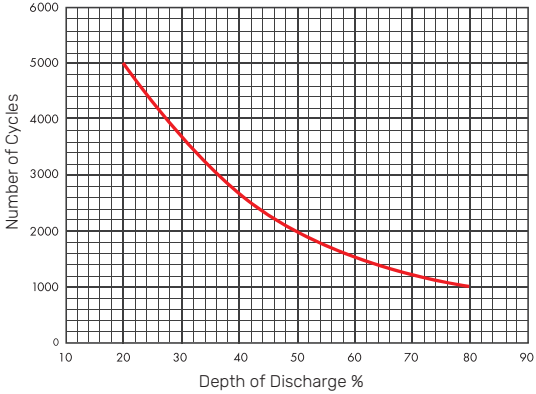
TEMPERATURE V/S CAPACITY



PERFORMANCE CURVES AT DIFFERENT RATES OF DISCHARGE



CYCLE LIFE V/S DOD FOR 12V



Technical specifications are subject to change without prior notice.

Battery image shown is indicative and may vary from the actual