

## **AFRII POWER PRODUCT SPECIFICATIONS**

### **10KVA/120V Home UPS**

#### **MAINS MODE**

1	Mains AC low cut UPS mode	175VAC±10VAC
2	Mains AC low cut recovery UPS mode	185VAC±10VAC
3	Mains AC high cut UPS mode	265VAC±10VAC
4	Mains AC high cut recovery UPS mode	255VAC±10VAC
5	Mains AC low cut WUPS mode	90VAC±10VAC
6	Mains AC low cut recovery WUPS mode	110VAC±10VAC
7	Mains AC high cut WUPS mode	295VAC±10VAC
8	Mains AC high cut recovery WUPS mode	285VAC±10VAC
9	Input frequency range	48HZ to 54HZ
10	Voltage output in Mains mode	SAME AS INPUT
11	Charging current @100AH-135AH setting	12A±1A
12	Charging current @150AH-200AH setting	15A±1A
13	Frequency output in Mains mode	SAME AS INPUT

#### **BATTERY**

1	Battery type	LA/TUB/SMF
2	DC input voltage	120
3	Battery quantity	10
4	Float voltage	137V±0.4V
5	Boost voltage for LA battery	140V±0.4V
6	Boost voltage for tubular and SMF battery	145V±0.4V
7	Battery deep discharge recovery	Independent charger to recover Deep discharge battery

#### **BACKUP MODE**

1	Output voltage	220V+5%-10%(Untill battery low alarm)
2	Output frequency	50Hz ± 0.2Hz
3	Output waveform	Pure Sine Wave
4	No load current	1.3A±0.2A
5	Capacity resistive bulb load	8000watt
6	Discharging current @ full load	66A±2Amp.
7	Low battery warning	108V±0.4V
8	Low battery cut	106V±0.4V
9	Change over time in UPS mode	<10msec
10	Change over time in WUPS mode	<25msec

#### **PROTECTION**

1	Overload in backup mode	≤100% load continuously run
2	Short circuit in Backup mode	System will shutdown after 3 retries
3	Short circuit in Mains mode	AC MCB will trip
4	Reverse Battery	DC MCB will trip
5	Over Temperature	System will indicate on LCD and through buzzer as well
6	Low battery	System will indicate on LCD and through buzzer as well

## TUBULAR DEEP CYCLE BATTERY DATA SHEET

(12V 220Ah@C20)

Nominal Voltage	Rated Capacity@10Hr		Dimensions in mm			Battery Gross weight (Kg)
			Length	Width	Height	
12	220Ah	C20	505±3	190±3	410±3	66±3%

## TALL TUBULAR DEEP CYCLE BATTERY DATA SHEET

(12V 220Ah@C20)

### APPLICATIONS

- Solar Backup and renewable energy system
- Telecom Communication Equipment
- Fire Alarm & Security Systems
- Medical Instruments
- Computer & Data centre backup
- Electronics PBX System.
- Power Plant & Sub Stations.
- Process Instruments and Control.



### ELECTRICAL PARAMETERS

Battery Specified Capacity Test @ 27 °C					
C20@10.5V	C10@10.8V	C5@10.8V	C3@10.8V	C2@10.8V	C1@10.5V
224	204	181	159	142	107

Ah & Wh Efficiency			
Ah Efficiency	> 93%	Wh Efficiency	>80%

OCV at 100% SOC -12.60 - 12.70		Backup @ 400 Watt Load ± 5 minutes - 5Hours
<b>ISO Standards IEC Standards</b>	<b>Certified ISO 9001:2008 / ISO 14001:2004 / IEC : NIS IEC 61427- 1: 2013</b>	Self Discharge ( 27°C ): 3 Month Storage - Remaining Capacity: 88% 6 Month Storage - Remaining Capacity: 75%
Cyclic use	Max. Current 25A   Temp Compensation on 15mV/°C   Cycle Use 14.4 to 14.6 volt	
Float Use	Max. Current 25A   Temp Compensation on 15mV/°C   Standby Use 13.5 to 13.8 volt	

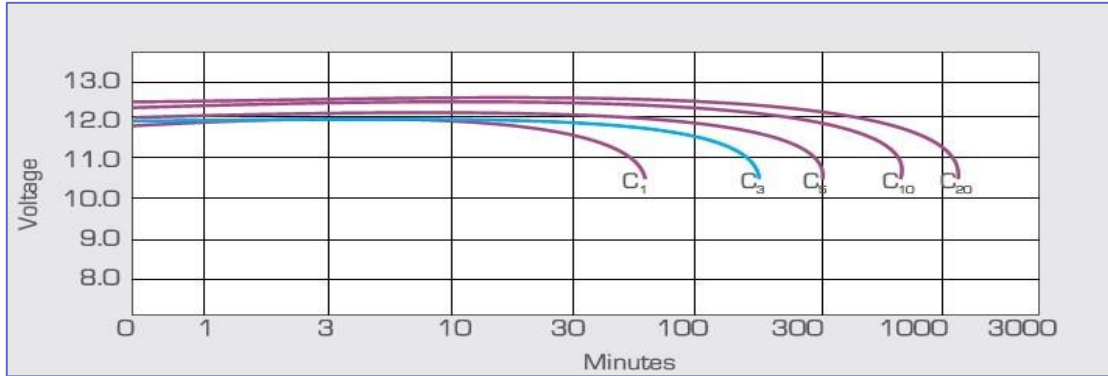
#### UNIQUE FEATURES:

1. Super TUFF Grid Design with double side pasting for longer battery life.
2. Tubular Plates with Gauntlets, made of special fabric having ultra-fine pores and high permeability to ensure higher backup and longer life.
3. NAM with Active Carbon: Increased reaction surface area for higher backup.
4. Futuristic Design: New-age premium design with durable high-quality material.
5. Low Antimony alloy - Lesser water consumption and reduced water top-up.
6. Optimized Negative paste recipe for fast charge acceptance.
7. Robust Tubular with High pressure die-cast spine - rate of grid corrosion is very low & higher float life.
8. Ceramic Vent Plugs- Special ceramic vent plugs for controlled acid fumes.
9. Highest purity CP Grade Sulphuric Acid for increased storage life.

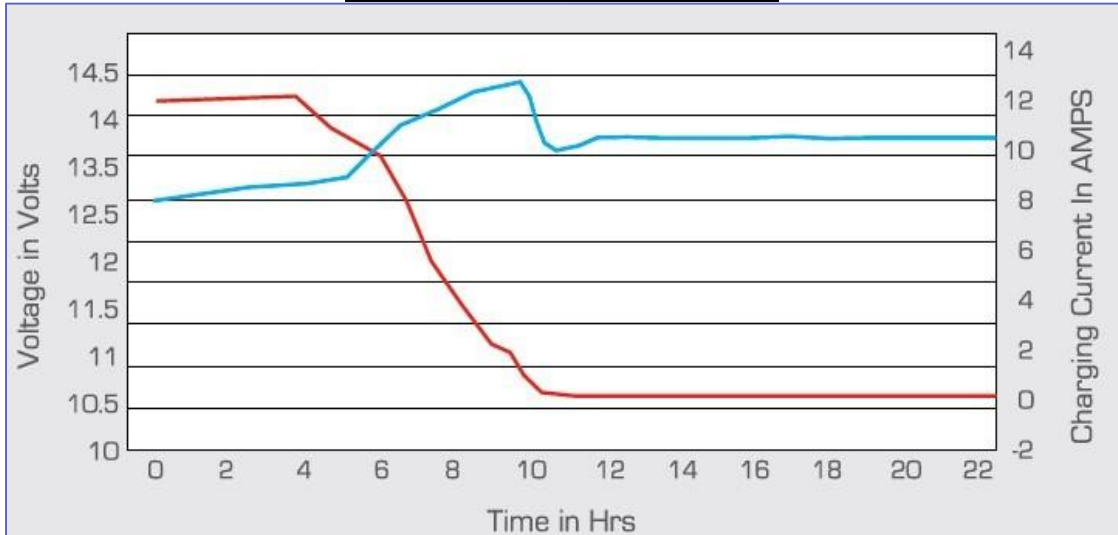
# TUBULAR DEEP CYCLE BATTERY DATA SHEET

(12V 220Ah@C20)

## DISCHARGING CHARACTERISTICS at various rates @ 27°C



## CHARGING CHARACTERISTICS



## EXPECTED LIFE @ 27°C

