

UP Series ZS450-12



ADVANCED TUBULAR

MEETS IEC 61427-1 SPECIFICATIONS



**NO
INTERNAL PACKING**



PATENTED CONTAINER
287292, 287295



**LOW
MAINTENANCE**



**PARTIAL STATE OF
CHARGE CONDITION**



**FASTER
RECHARGE**



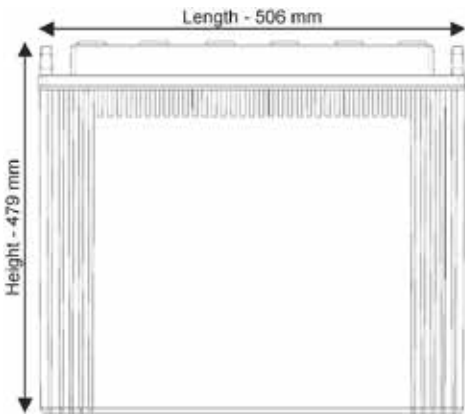
**LONGER
LIFE**



**SUPERIOR
VOLTAGE**



**INCREASED
BACK-UP**



Features

Benefits

Long Cycles (1100@80% DOD, 5000@20% DOD)	Long design life
Topping up frequency: 8 to 10 months	Very low maintenance
High temperature performance	Can handle extreme weather conditions
High charge acceptance	Rugged Performance
Self discharge rate - 3% per month @ STC	Longer life without charging
Higher AH Efficiency > 90% WH Efficiency > 80%	More efficient and saves money

Technical Data

Type of Battery	Nominal Voltage	Capacity @C100 at 27°C	Gross Battery Weight +/- 3% (Kg)	Overall Dimension			Terminal Type
				Length +/-3 mm	Width +/-3 mm	Height upto float top +/-3 mm	
	(V)	(Ah)	(mm)	(mm)	(mm)		
UP-ZS450-12	12	450	72	506	190	479	L

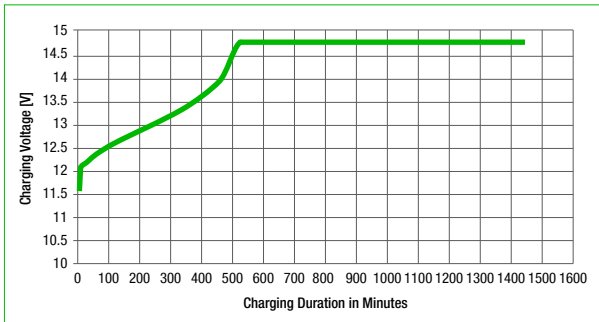
Technical Specifications Are Subject To Change Without Prior Notice.

Electrical Parameters & Charging Profile

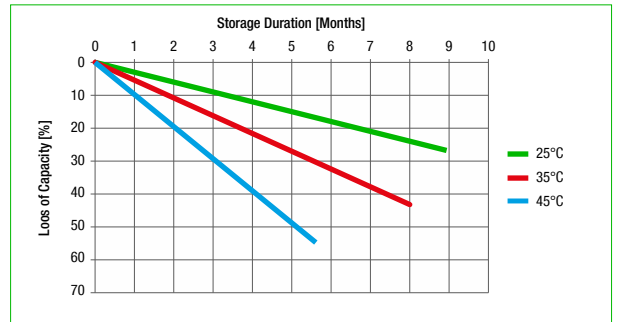
Battery Specified Capacity Test @ 27°C			
MODEL	C100 (Ah)	C20 (Ah)	C10 (Ah)
UP-ZS450-12	450	330	300
Ah & Wh Efficiency			
Ah Efficiency	>90%	Wh Efficiency	>80%

- Poly Components Material: Polypropylene Copolymer
- Watering System: Individual to every cell in Monobloc
- Testing Parameters: IS 13369:1992 & IEC 61427

Charging Profile



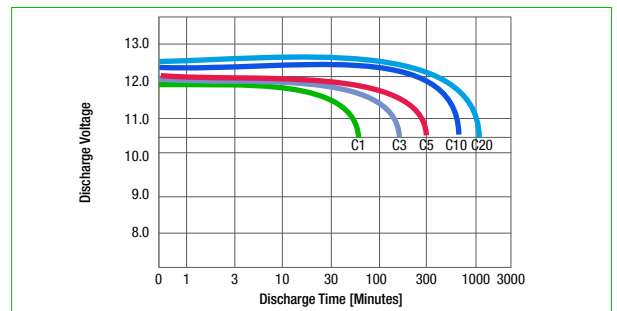
Self Discharge Characteristics @ Different Temperature



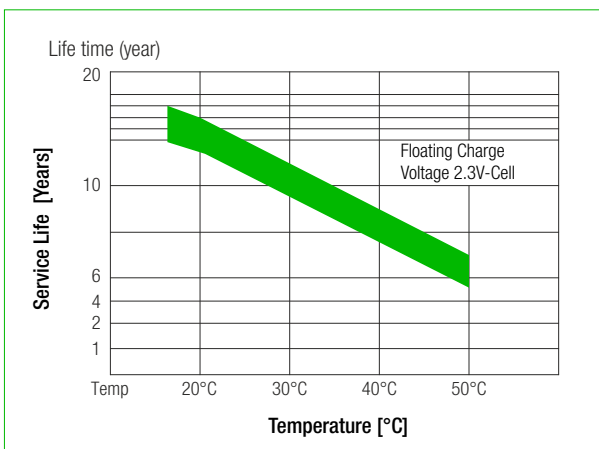
State of Charge Measure of Open-circuit Voltage @ 27°C

State of Charge	Specific Gravity	Voltage
100%	1240±10	12.55V-12.70V
75%	1125±10	≤12.4V
50%	1200±10	≤12.1V
25%	1175±10	≤12.0V
0%	1150±10	11.8V

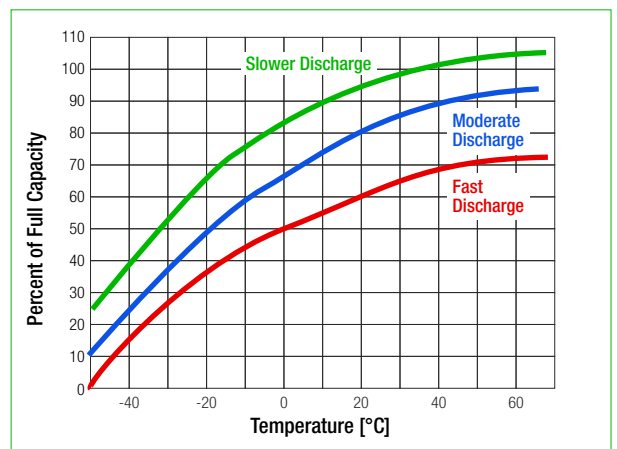
Discharging Characteristics at Various Rates @ 27°C



Service (Float) Life and Temperature



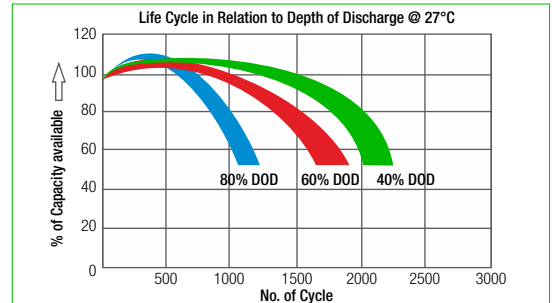
Expected Capacity vs Temperature



Specific Gravity & Self Discharge w.r.t. Temperature

	Add	Subtract
CHARGING TEMPERATURE COMPENSATION	0.005 volt per cell for every 1°C below 25°C 0.0028 volt per cell for every 1°F below 77°F	0.005 volt per cell for every 1°C above 25°C or 0.0028 volt per cell for every 1°F below 77°F
OPERATIONAL DATA	Operating Temperature -4°F to 131°F (-20°C to +55°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%	Self Discharge As per discharge Graph

Expected Life



Charging Instructions

Charger Voltage Settings (at 77°F / 25°C)			
System Voltage	12V	24V	48V
Maximum Charge Current	02 C10		
Maximum Absorption Phase Time (hours)	4		
Absorption Voltage	14.4	28.8	57.6
Float Voltage	13.6	27.2	54.4
Equalization Voltage	16	32	64
Do not install or charge batteries in a sealer or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.			
Periodic Charge	Provide a periodic freshening charge to maintain a SOC greater than the threshold of 70%		

Terminal Configuration

Terminal Type: L
Terminal Height: 32.5 mm
Terminal Width: 32.8 mm
Terminal Length: 50.5 mm
Bolt Type: M8



Transport Vent Plug Type

MF Locking



Flot Type

Locking Flot indicator cum watering lid for each cell



Recycle Responsibly

