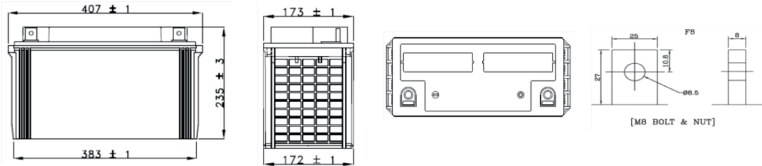


TECHNICAL DATA SHEET FOR MD-100 Premium (12V 100AH) VRLA BATTERY



CONSTRUCTION:

- ▶ Positive and negative plates in lead-tin-calcium alloy.
- ▶ Separator - low resistance micro porous glass fiber.
- ▶ The electrolyte is absorbed within this material, preventing acid leakage in case of accidental damage.
- ▶ Terminals with a large surface area copper insert to provide maximum conductivity.
- ▶ Self regulating pressure relief valve with integral flame arrestor.
- ▶ 100% ensured capacity (through Data-logger) during manufacturing.
- ▶ Stronger, sturdier & attractive packaging.
- ▶ Specially suited for UPS & Power Application

FEATURES: -

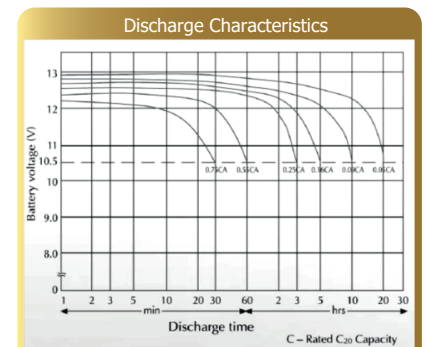
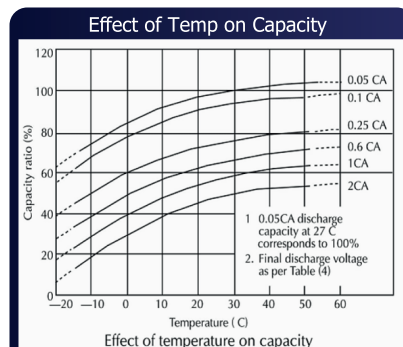
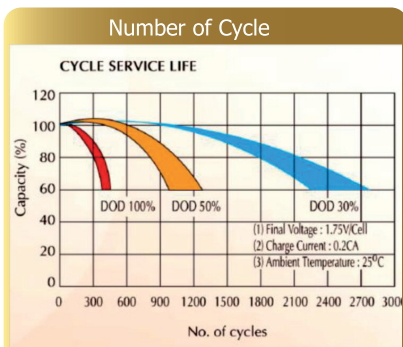
- ▶ Sealed Maintenance Free .
 - ▶ Free from Orientation Constraints.
 - ▶ Eco Friendly.
 - ▶ Minimal Voltage Drop.
 - ▶ Easy Handling -Easy Installation.
 - ▶ Ready To Use.
 - ▶ Extended Cycle Life.
 - ▶ Low Self Discharge.
 - ▶ Charge Retention & Recovery.
 - ▶ Superior High Rate Discharge.
 - ▶ High Reliability.
 - ▶ Deep Cycle Application
- Performance Characteristics conforming to JISC8702

SPECIFICATION CHART

Type of Battery	Nominal Voltage (V)	20 hrs 1.75 V/cell	10 hrs 1.75 V/cell	3 hrs 1.70 V/cell	1.5 hrs 1.70 V/cell	1 hrs 1.60 V/cell	30 mins 1.60 V/cell	Overall Height (±3)	Height up to Lid (±3)	Length (±1)	Width (±1)	Weight ±5% (Kg)
MD-100 Premium	12	100	91.0	75.0	72.0	60.0	50.0	235.0	235.0	407.0	173.0	34.70

NOTES ON OPERATION

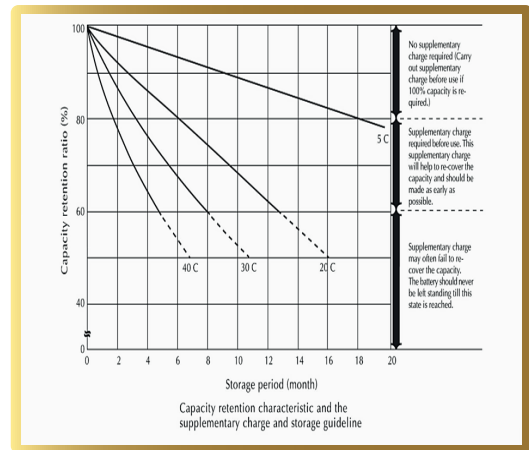
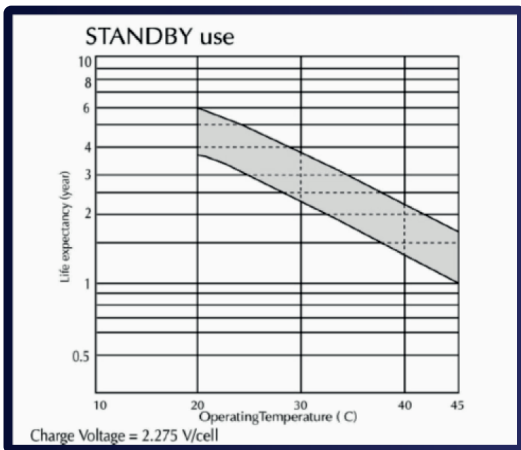
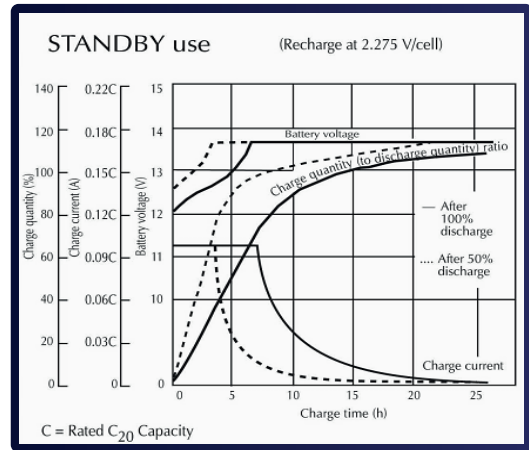
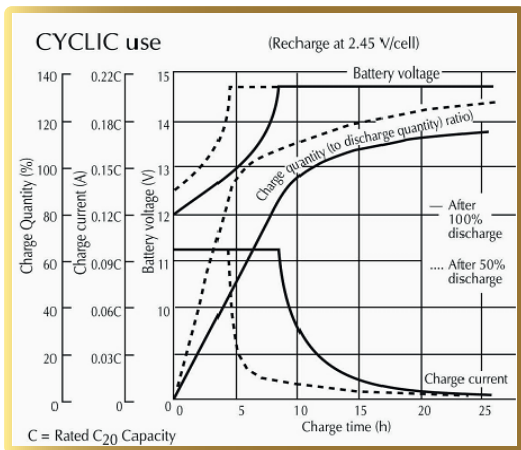
Mode of Operation	Voltage setting per 12V unit for ambience Temp. 20 -30 @C	Current setting
FLOAT	13.7V+/-0.1V	Maximum :0.3CA
CYCLE	14.7V +/-0.1V	Minimum: 0.1CA



Constant Power Discharge Rating in Watts per Battery for		POWERSAFE NXT Range @27°C					
	AH	5 min	10 min	15 min	20 min	30 min	60 min
Watt/Battery @ 1.6 0V	100 AH	3834	2569	2015	1618	1207	749
Watt/Battery @ 1.7 0V		3660	2416	1948	1583	1200	724
Watt/Battery @ 1.80V		3307	2323	1810	1491	1125	682

Discharge Current & Recommended Final Discharge Voltage

Discharge Current (A)	Final Discharge Voltage(V/Cell)
0.2 C > (A) or intermittent discharge	1.75
0.2 C < or = (A) < 0.5 C	1.70
0.5 C < or = (A) < 1.0 C	1.55
1.0 C < or = (A)	1.30



Product Details	
AH Efficiency	>95%
WH Efficiency	>84%
Operating Temperature Range	(-)5°C to 40°C
Self Discharge/Month @ 27deg C	5% of Rated Capacity
Recommended period of storage	3 months from the date of dispatch and to be stored in a covered place at 27 °C
Material of container	PPCP
Type of +ve & -ve plate	Flat Pasted
Recommended Terminal Torque	12.3 N-m

MAXIMUM DISCHARGE CURRENT FOR VARIOUS DURATION & CUT-OFF VOLTAGE

END VOLTAGE/ CELL	TEMP(C)	DISCHARGE TIME														
		0.5min	1 min	5min	10min	15min	20min	30min	1 hrs	1.5 hrs	2 hrs	3 hrs	4 hrs	6 hrs	8 hrs	10 hrs
1.80	25	3.2C	3.15C	2.6C	2.0C	1.65C	1.4C	1.1C	0.64C	0.42C	0.36C	0.270C	0.210C	0.145C	0.110C	0.090C
	5	2.55C	2.4C	2.0C	1.65C	1.3C	1.1C	0.95C	0.59C	0.34C	0.29C	0.230C	0.182C	0.129C	0.098C	0.080C
	-5	2.1C	2.05C	1.6C	1.3C	1.0C	0.86C	0.76C	0.48C	0.28C	0.24C	0.198C	0.154C	0.115C	0.087C	0.071C
1.70	25	4.3C	4.2C	3.2C	2.3C	1.8C	1.5C	1.15C	0.67C	0.48C	0.40C	0.290C	0.230C	0.165C	0.130C	0.108C
	5	3.8C	3.65C	2.5C	1.8C	1.5C	1.2C	1.0C	0.62C	0.39C	0.32C	0.250C	0.199C	0.143C	0.116C	0.096C
	-5	2.9C	2.7C	2.0C	1.6C	1.2C	1.0C	0.86C	0.53C	0.32C	0.27C	0.213C	0.168C	0.123C	0.103C	0.086C
1.65	25	4.85C	4.7C	3.35C	2.35C	1.85C	1.55C	1.2C	0.69C	0.50C	0.41C	0.300C	0.240C	0.170C	0.135C	0.110C
	5	3.9C	3.8C	2.6C	1.9C	1.6C	1.3C	1.05C	0.64C	0.40C	0.33C	0.260C	0.208C	0.147C	0.120C	0.098C
	-5	3.1C	3.0C	2.1C	1.6C	1.25C	1.05C	1.88C	0.54C	0.34C	0.27C	0.220C	0.176C	0.125C	0.107C	0.087C
1.60	25	5.4C	5.2C	3.5C	2.4C	1.9C	1.6C	1.25C	0.7C	0.51C	0.42C	0.310C	0.250C	0.180C	0.140C	0.115C
	5	4.0C	3.9C	2.75C	2.0C	1.7C	1.4C	1.10C	0.66C	0.41C	0.34C	0.270C	0.216C	0.156C	0.125C	0.102C
	-5	3.3C	3.2C	2.2C	1.65C	1.3C	1.1C	0.9C	0.55C	0.34C	0.28C	0.227C	0.183C	0.132C	0.111C	0.091C

Note: C represents the C20 rated capacity