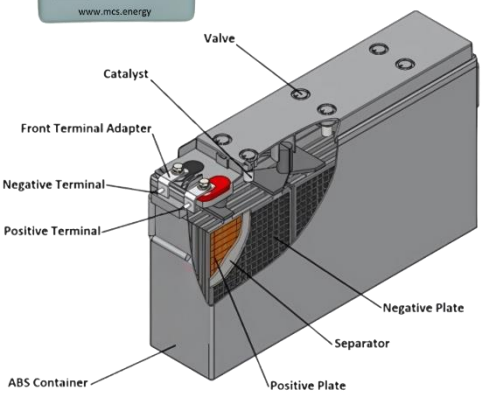
12V 105Ah- 200Ah

DEEP CYCLE VALVE REGULATED
LEAD ACID BATTERY
DATA SHEET

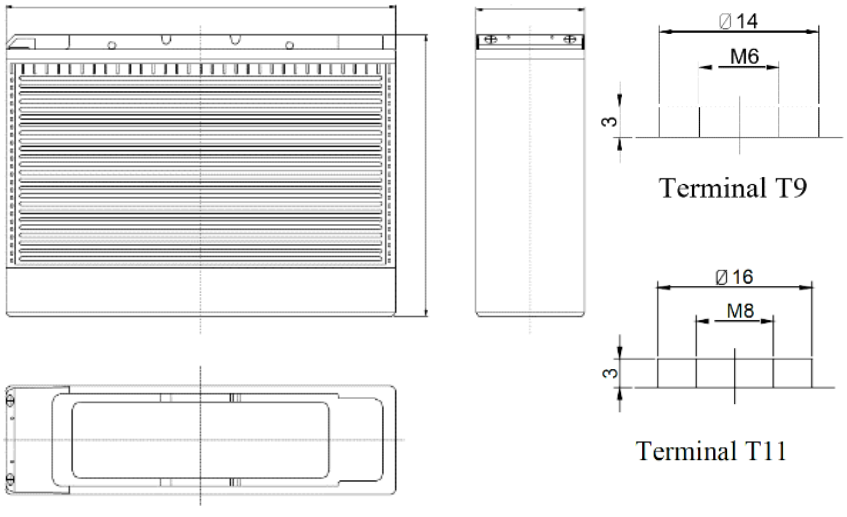
"Join the green revolution and harness the unlimited power of the sun with solar energy solutions from eTUIT".

APPLICATION AND KEY BENEFITS

- Designed for high energy density installations and other low-rate discharge applications.
  Ideal for:
  - Telecommunication
  - Outdoor wireline cabinets
  - Broadband, microwave repeater and fibre optic regeneration sites
  - Extended back solutions in utility switchgear and industrial applications
  - Marine, medical, geophysical, and other electronic equipment
  - Alarm and security systems.
  - Use in areas with stable or unstable on-grid power supply.
- 15 years of design life
- Non-spillable
- Front terminal connections
- High-quality products with high reliability
- Solid copper terminals
- ABS container with absorbent glass mat technology
- Cyclic and standby applications
- Compliant to UL, CE, ILAC, VDS.



MODEL		LFP12V105Ah	LFP12V150Ah	LFT12V200Ah
Normal Voltage		12 V		
Capacity (25°C)	10HR (10.8V)	105 Ah	150 Ah	200 Ah
	5HR (10.5V)	92 Ah	131Ah	175 Ah
	1HR (9.60V)	65 Ah	93 Ah	124 Ah
Dimensions	Length	395±2mm	551±3mm	546±3mm
	Width	110±2mm	110±2mm	125±2mm
	Height	286±2mm	287±2mm	317±2mm
	Total height	286±2mm	287±2mm	323±2mm
Approx. Weight		32kg ±4%	45.5kg ±4%	59kg ±4%
Terminal type		T9	T11	T11
Internal resistance (Fully charged, 20°C)		± 5.5mΩ	± 4mΩ	±3.2mΩ
Capacity affected by temperature (10hr)	40°C	102%		
	25°C	100%		
	0°C	85%		
	-15°C	65%		
Self-discharge (25°C)	3 months	Remaining Capacity: 91%		
	6 months	Remaining Capacity: 82%		
	12 months	Remaining Capacity: 65%		
Nominal operating temperature		25°C±3°C		
Operating temperature range	Discharge	-15°C~50°C		
	Charge	0°C~40°C		
	Storage	-15°C~40°C		
Float charging voltage or standby (25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C		
Cyclic charging voltage (25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C		
Maximum charging current		31.5A	45A	60A
Short circuit current		2040A	-	3820A



LFP12105FT

CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A, 25℃)

F.V/TIME	15min	30 min	60 min	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
9.60V	170	103	65.1	38.4	26.8	22.0	18.7	16.4	12.9	10.7	5.61
9.90V	166	101	64.1	38.1	26.6	21.8	18.6	16.3	12.8	10.7	5.60
10.2V	160	97.8	62.5	37.8	26.4	21.7	18.5	16.2	12.7	10.6	5.58
10.5V	154	95.4	61.3	37.2	26.3	21.5	18.4	16.1	12.6	10.6	5.55
10.8V	146	91.9	59.4	36.3	35.5	20.9	17.8	15.6	12.2	10.5	5.51

CONSTANT POWER DISCHARGE CHARACTERISTICS (WATT, 25℃)

F.V/TIME	15min	30 min	60 min	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
9.60V	1 864	1 155	742	444	315	258	222	194	153	128	67.3
9.90V	1 819	1 131	731	442	313	257	220	193	152	127	67.2
10.2V	1 752	1 097	712	438	311	255	219	191	151	127	67.0
10.5V	1 693	1 070	698	431	309	253	217	190	150	126	66.6
10.8V	1 603	1 031	677	420	299	246	211	184	145	125	66.2

LFP121505FT

CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A, 25℃)

F.V/TIME	5min	10 min	15 min	30 min	60 min	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.60 v/cell	473	315	243	147	93	54.8	38.3	31.4	26.8	23.4	18.4	15.3	8.02
1.65 v/cell	458	306	237	144	91.6	54.5	38	31.2	26.6	23.3	18.3	15.2	8
1.70 v/cell	440	293	228	140	89.3	54	37.8	31	26.4	23.1	18.1	15.2	7.98
1.75 v/cell	421	280	220	136	87.5	53.2	37.5	30.8	26.3	23	18	15.1	7.93
1.80 v/cell	397	265	209	131	84.8	51.8	36.4	29.8	25.5	22.3	17.5	15	7.88

POWER DISCHARGE CHARACTERISTICS (WATT, 25℃)

F.V/TIME	5min	10 min	15 min	30 min	60 min	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.60 v/cell	827	567	453	275	177	106	75	61.5	52.7	46.2	36.3	30.3	16
1.65 v/cell	802	550	442	269	174	105	74.5	61.2	52.5	45.8	36.2	30.3	16
1.70 v/cell	769	527	426	261	170	104	74	60.7	52	45.5	35.8	30.2	16
1.75 v/cell	736	505	411	255	166	103	73.5	60.3	51.7	45.2	35.7	30	15.9
1.80 v/cell	695	476	390	246	161	100	71.3	48.5	50.2	43.8	34.5	29.8	15.8

LFP12200FT

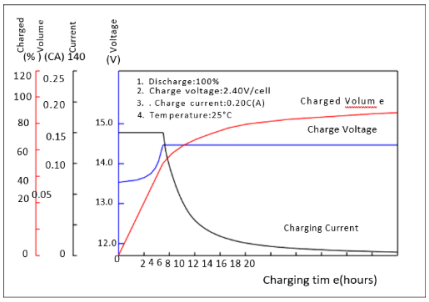
CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A, 25℃)

F.V/TIME	5min	10 min	15 min	30 min	60 min	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
9.60V	630	420	330	196	124	73.1	51.0	41.8	35.7	31.2	24.4	20.3	10.7
9.90V	611	408	322	192	122	72.7	50.7	41.6	35.4	31.0	24.3	20.3	10.7
10.2V	586	391	310	187	119	72.0	50.3	41.3	35.2	30.8	24.2	20.2	10.6
10.5V	561	373	300	182	117	70.9	50.0	41.0	35.0	30.6	24.0	20.1	10.6
10.8V	529	353	284	176	113	69.1	48.6	39.8	34.0	29.7	23.3	20.0	10.5

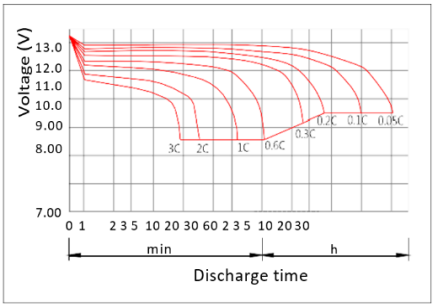
CONSTANT POWER DISCHARGE CHARACTERISTICS (WATT, 25℃)

F.V/TIME	5min	10 min	15 min	30 min	60 min	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
9.60V	6616	4536	3623	2199	1413	847	600	492	422	369	291	243	128
9.90V	6417	4400	3537	2156	1392	841	597	489	420	367	289	242	128
10.2V	6152	4219	3406	2089	1357	833	592	486	417	364	287	242	128
10.5V	5888	4037	3290	2039	1330	821	588	482	413	362	286	240	127
10.8V	5557	3810	3117	1963	1289	800	570	468	401	351	277	239	126

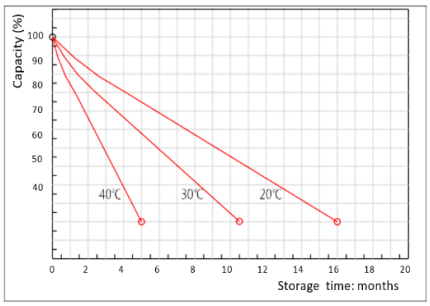
Charging Characteristics



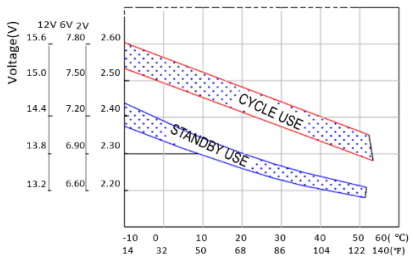
Discharging Characteristics (25℃)



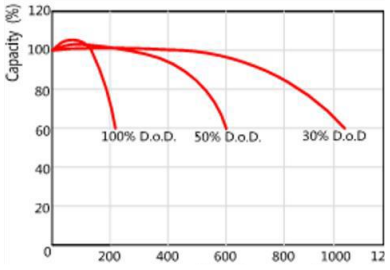
Self-discharge Characteristics



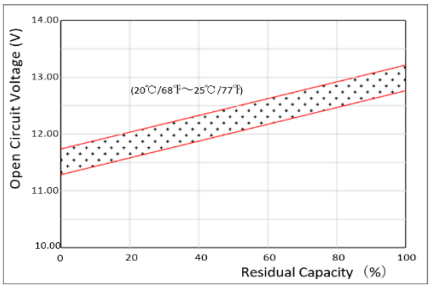
Relationship for Charging



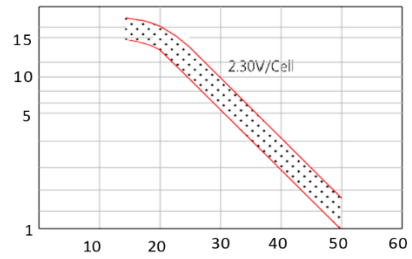
Cycle Life of D.O.D. (25℃)



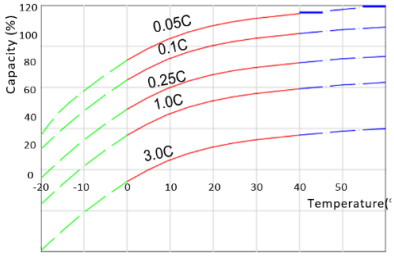
The Relationship of Open Circuit Voltage and Residual Capacity (25°C)



Floating Life on Temperature



Effect of Temperature on Capacity



ENVIRONMENTAL PROTECTION

THE ENVIRONMENTAL LABEL

This mark indicates that the product described in this manual does not contain toxic and hazardous substances or elements. It is a green product, and can be recycled after being discarded, and should not be discarded incorrectly.

RECYCLE

This mark indicates that the product cannot be disposed of with other waste.

Please refer to the Product recycling Guidelines

After the battery life is terminated, the battery can continue to be used after it is recycled by a professional recycling organisation. Do not discard incorrectly.

Recycling must be performed according to national and local regulations for end-of-life treatment of Electrical and Electronic equipment. Batteries must be handled separately from other waste and kept away from open fire. All work must be done according to good operating practices and strict safety standards, following all relevant health and safety aspects.

ABBREVIATIONS

H Height	**SOC** State of Charge	W Width
ESN equipment serial number	**D** Depth	NTC Negative Temperature Coefficient
UPS Uninterruptible Power System	**OCV** Open Circuit Voltage	PCS Power Conversion System
DOD Depth of Discharge	**ESM** Energy Storage Module	ESN Equipment Serial Number
EOD End Of Discharge	EPO Emergency Power Off	UPS Uninterruptible Power System

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REGIONAL CONTACT INFORMATION

Address: **Africa Network Solutions (ANSOL)**
Growth Point Industrial Estate
Unit A4, 1 Bell Street
Meadowdale
Germiston
Johannesburg
1401
South Africa

E-mail: info@africanetworksolutions.co.za

CHANGE HISTORY

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