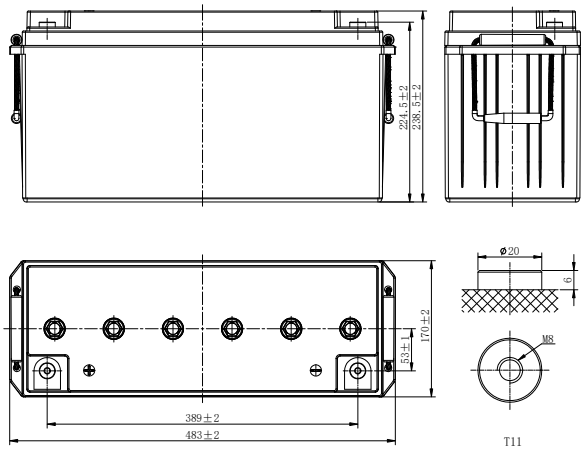
LPGS SERIES-HYBRID GEL BATTERY

LPGS12-140 (12V140Ah)

LEOCH BATTERY



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25℃)	C_{10},1.80V/cell	140Ah
Dimension	Length	483mm (19.0inches)
	Width	170mm (6.69inches)
	Container Height	238.5mm (9.39inches)
	Total Height	238.5mm (9.39inches)
Approx Weight		41.8kg (92.2lbs)
Terminal		T11(M8)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		2800A
Internal Resistance (25℃)		Approx 4 mΩ (Fully charged)
Operating Temp. Range	Discharge	-20~55℃ (-4~131°F)
	Charge	-20~40℃ (-4~104°F)
	Storage	-20~50℃ (-4~122°F)
Nominal Operating Temp. Range		25±3℃ (77±5°F)
Max.Charging Current (25℃)		0.25C
Charge voltage (25℃)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.40V/cell
Temp. Coeffcient	-3mV/cell/℃	-5mV/cell/℃
Effect of temp. to Capacity	40℃ (104°F)	103%
	25℃ (77°F)	100%
	0℃ (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F). LPGS series batteries can be stored up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)													
F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	150.9	126.2	99.8	75.8	62.7	39.9	31.0	25.5	21.7	18.9	15.3	13.0	7.00
1.80V/cell	179.7	147.0	114.8	86.0	69.7	43.3	33.2	27.1	23.2	20.3	16.3	14.0	7.21
1.75V/cell	200.3	161.5	122.4	90.9	73.7	45.4	34.4	28.0	23.8	20.8	16.6	14.1	7.28
1.70V/cell	216.3	171.6	129.1	95.5	77.0	47.6	35.7	28.8	24.5	21.2	16.9	14.2	7.42
1.67V/cell	227.8	180.6	135.1	98.4	79.7	48.9	37.0	29.7	25.0	21.7	17.1	14.4	7.49
1.60V/cell	245.7	193.9	143.6	104.0	83.6	50.7	38.3	30.4	25.5	22.1	17.3	14.6	7.56
Constant Power Discharge (Watts/cell) at 25°C (77°F)													
F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	283.7	239.8	191.1	146.3	121.4	77.7	60.5	49.9	42.6	37.1	30.4	25.9	13.9
1.80V/cell	333.6	275.4	217.3	164.7	134.4	83.9	64.7	52.9	45.5	39.8	32.3	27.7	14.3
1.75V/cell	367.0	299.2	229.6	172.8	141.5	87.6	66.8	54.5	46.5	40.7	32.8	28.0	14.4
1.70V/cell	390.3	315.3	240.4	180.4	147.1	91.7	69.0	56.0	47.6	41.5	33.2	28.1	14.7
1.67V/cell	407.0	328.6	249.5	184.3	151.3	93.6	71.2	57.5	48.5	42.3	33.6	28.4	14.8
1.60V/cell	431.6	349.0	262.9	193.7	157.7	96.6	73.4	58.6	49.4	43.0	34.0	28.7	14.9

LPGS SERIES-HYBRID GEL BATTERY

LPGS12-140 (12V140Ah)

LEOCH BATTERY

APPLICATIONS

- UPS
- Wind,solar and renewable energy
- Street lamp,CATV,oil and gas
- Poor grid reliability back-up applications
- Hybrid telecom remote base stations
- All extreme environment off-grid applications

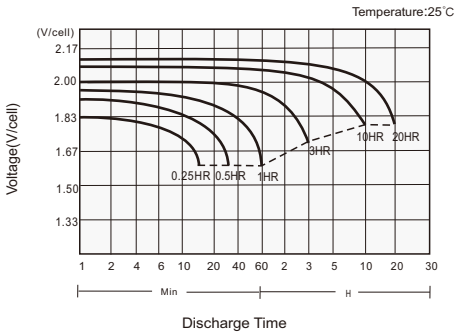
GENERAL FEATURES

- 12 years design life (25℃)
- Proven AGM-GEL technology
- Excellent deep discharge recovery and cyclability
- Very low maintenance: no water addition
- Low self-discharge rate

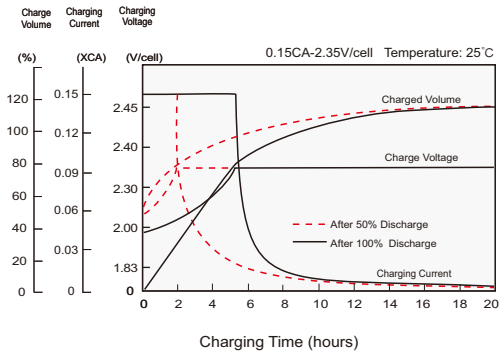
STANDARDS

- IEC60896 Certified
- Classified as"Long Life" according to Eurobat
- UL,CE Approved
- Manufactured in Leoch®IATF 16949, ISO 45001,ISO 9001 and ISO 14001 certified production facilities

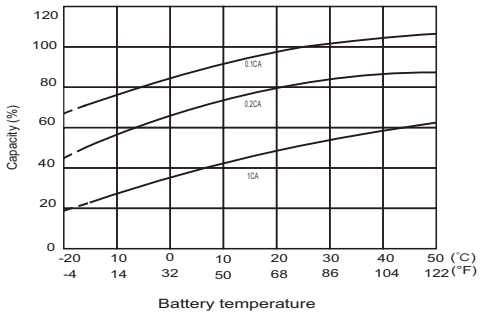
Discharge Characteristics



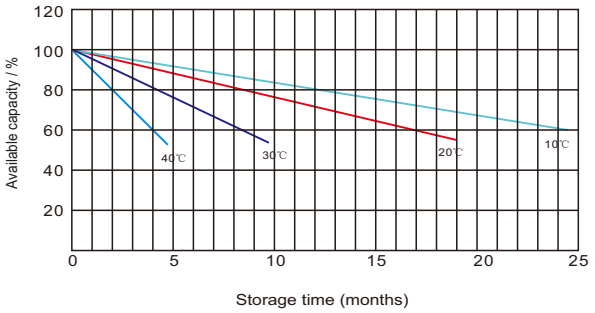
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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