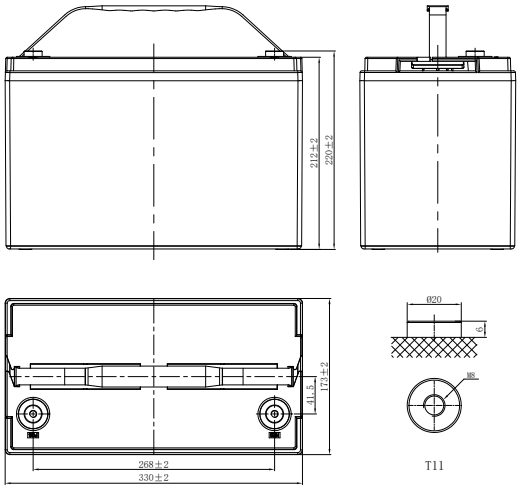
LPGS SERIES-HYBRID GEL BATTERY

LPGS12-110 (12V110Ah)

LEOCH BATTERY





CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25˚C)	C_{20},1.75V/cell	110Ah
Dimension	Length	330mm (13.0inches)
	Width	173mm (6.81inches)
	Container Height	212mm (8.35inches)
	Total Height	220mm (8.66inches)
Approx Weight		31.5kg (69.4lbs)
Terminal		T11(M8)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		2000A
Internal Resistance (25˚C)		Approx 4.9 mΩ (Fully charged)
Operating Temp. Range	Discharge	-20~55˚C (-4~131°F)
	Charge	0~40˚C (32~104°F)
	Storage	-20~50˚C (-4~122°F)
Nominal Operating Temp. Range		25±3˚C (77±5°F)
Max.Charging Current (25˚C)		0.25C
Charge voltage (25˚C)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.40V/cell
Temp. Coeffcient	-3mV/cell/˚C	-5mV/cell/˚C
Effect of temp. to Capacity	40˚C (104°F)	103%
	25˚C (77°F)	100%
	0˚C (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	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h
1.90V/cell	48.7	30.7	23.4	19.2	16.2	13.9	10.8	8.91	4.77	2.13	1.45	1.05
1.85V/cell	58.2	34.4	25.7	20.9	17.6	15.2	11.8	9.74	5.24	2.30	1.57	1.14
1.80V/cell	62.9	36.2	27.0	21.7	18.2	15.6	12.2	10.0	5.37	2.37	1.62	1.18
1.75V/cell	66.1	37.8	27.8	22.3	18.6	16.0	12.4	10.2	5.50	2.41	1.64	1.20

Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h
1.90V/cell	95.3	60.5	46.6	38.2	32.5	27.9	21.7	17.8	9.52	4.26	2.89	2.09
1.85V/cell	112.8	67.2	50.7	41.3	35.0	30.1	23.5	19.4	10.5	4.60	3.14	2.30
1.80V/cell	120.8	70.2	52.8	41.5	36.0	31.0	24.3	19.9	10.7	4.73	3.24	2.37
1.75V/cell	126.5	73.0	54.3	43.7	36.6	31.5	24.6	20.2	10.9	4.82	3.29	2.41

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APPLICATIONS

- Solar energy (wind energy) household system/ communication/ communication base station
- Movable energy storage system
- Solar traffic lights
- Solar, wind and solar power generation
- Emergency lighting system

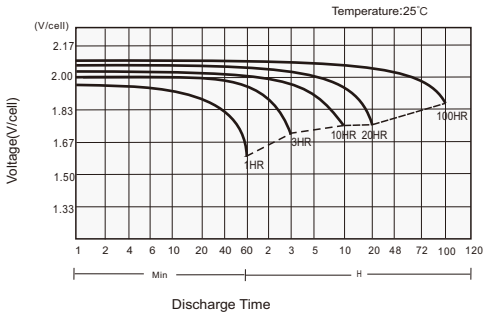
GENERAL FEATURES

- Proven AGM-GEL technology
- Excellent deep discharge recovery and cyclability
- Very low maintenance: no water addition
- Low self-discharge rate

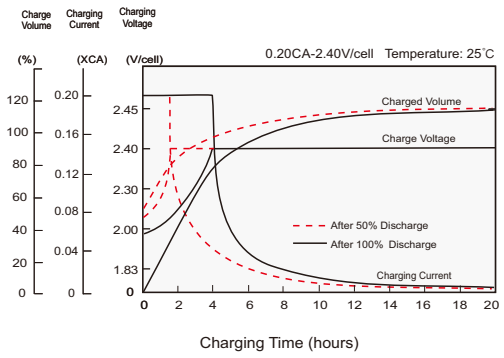
STANDARDS

- 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

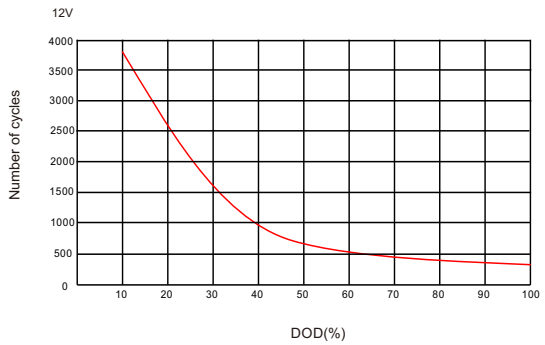
Discharge Characteristics



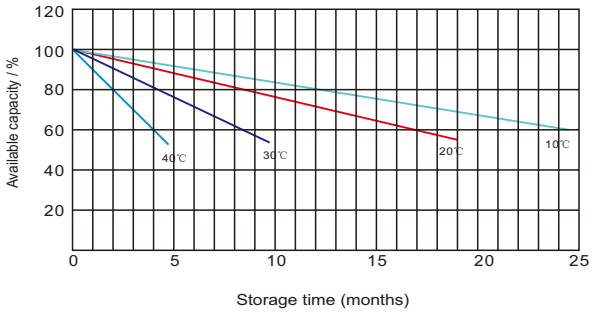
Charging Characteristics



Cycle Life in Relation to DoD



Self Discharge Characteristics



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