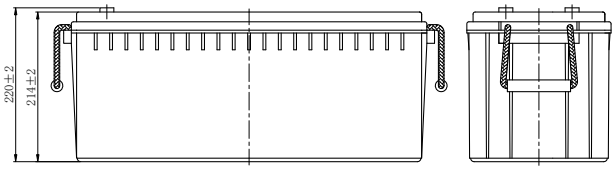
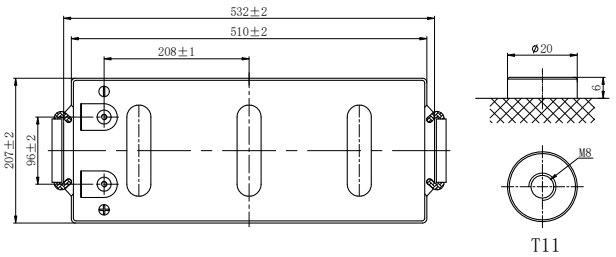
LPGS SERIES-HYBRID GEL BATTERY

LPGS12-190 (12V190Ah)

LEOCH BATTERY





CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25˚C)	C_{20},1.75V/cell	190Ah
Dimension	Length	532mm (20.9inches)
	Width	207mm (8.15inches)
	Container Height	214mm (8.43inches)
	Total Height	220mm (8.66inches)
Approx Weight		58.0kg (127.9lbs)
Terminal		T11(M8)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		3460A
Internal Resistance (25˚C)		Approx 3.2 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	84.1	53.0	40.5	33.2	27.9	24.0	18.7	15.4	8.25	3.68	2.50	1.81
1.85V/cell	100.5	59.4	44.5	36.1	30.4	26.2	20.4	16.8	9.04	3.97	2.71	1.98
1.80V/cell	108.7	62.6	46.6	37.4	31.4	27.0	21.1	17.3	9.27	4.09	2.80	2.04
1.75V/cell	114.2	65.4	48.1	38.6	32.1	27.6	21.5	17.7	9.50	4.16	2.84	2.08

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	164.6	104.5	80.5	66.0	56.1	48.3	37.5	30.8	16.4	7.35	4.99	3.61
1.85V/cell	194.8	116.0	87.5	71.3	60.5	52.1	40.7	33.5	18.1	7.95	5.42	3.97
1.80V/cell	208.6	121.3	91.2	71.7	62.2	53.5	41.9	34.4	18.5	8.17	5.60	4.09
1.75V/cell	218.5	126.2	93.9	75.5	63.3	54.4	42.5	35.0	18.9	8.32	5.68	4.16

LPGS SERIES-HYBRID GEL BATTERY

LPGS12-190 (12V190Ah)

LEOCH BATTERY

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

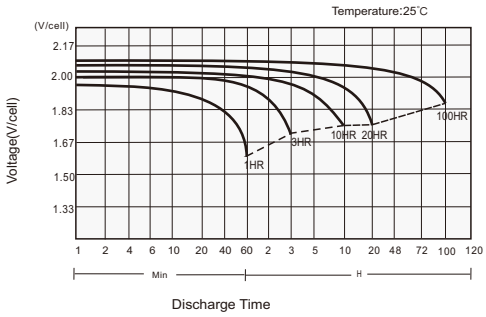
GENERAL FEATURES

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

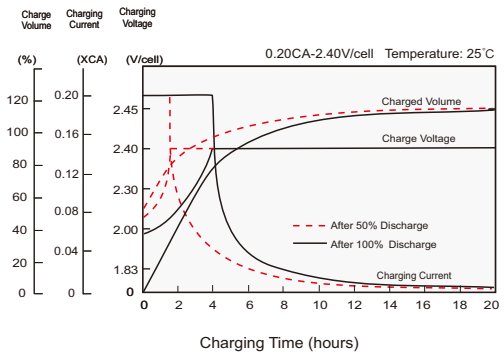
STANDARDS

- 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

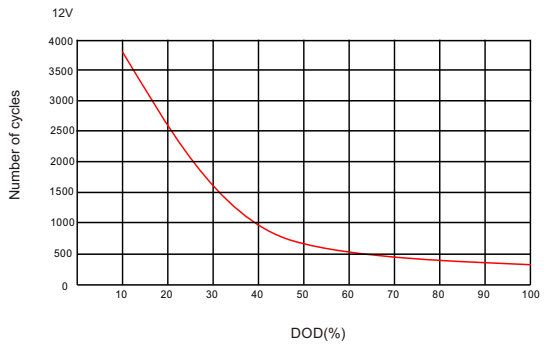
Discharge Characteristics



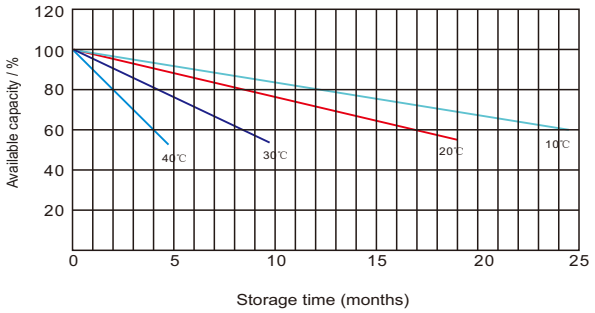
Charging Characteristics



Cycle Life in Relation to DoD



Self Discharge Characteristics



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