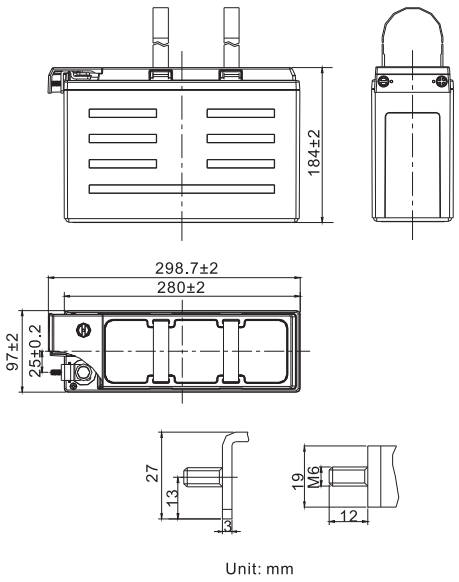
PLH+C-Pure Lead Carbon
PLH+C 40FT (12V38Ah)

LEOCH BATTERY

Specifications

Rated Voltage		12V
Nominal Capacity	C_{10},1.80V/cell	38Ah
	C_8,1.75V/cell	38Ah
Dimension	Length	298.7±2mm (11.76 inches)
	Width	97±2mm (3.82 inches)
	Container Height	184±2mm (7.24 inches)
	Total Height	184±2mm (7.24 inches)
Approx. Weight		12.5 Kg (27.5 lbs)
Terminal		M6
Container Material		PC-ABS flame retardant jar and cover to UL94 V-0
Rated Capacity (25°C)	38.0 Ah	(10hr, 3.80A,1.80V/cell)
	38.0 Ah	(8hr, 4.75A,1.75V/cell)
	35.9 Ah	(5hr, 7.18A,1.75V/cell)
	32.4 Ah	(3hr, 10.8A,1.75V/cell)
	28.1 Ah	(1hr, 28.1A,1.67V/cell)
Max. Discharge Current		456A
Internal Resistance (25°C)		Approx. 4.9mΩ(Fully charged)
Operating Temp.Range	Discharge	-40 ~ 65°C (-40 ~ 149°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-20 ~ 40°C (-4 ~ 104°F)
Nominal Operating Temp. Range		25±3°C (77±5°F)
Max.Charging Current(25°C)		11.4A
Charge voltage(25°C)	Float	13.62V
	Temp. Coefficient	-3mV/cell/°C
	Equalization	14.1~14.4V
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	PLH+C series batteries can be stored up to 24 months at 25°C(77°F), For higher temperatures the time interval will be shorter. Battery needs to be given a freshening charge when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first.	

Layout



Unit: mm

Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	72.5	59.7	51.1	40.0	30.5	24.3	14.6	10.4	8.44	6.92	4.60	3.76	2.02
1.80V/cell	79.7	64.7	54.8	42.4	31.9	25.5	14.9	10.6	8.57	7.05	4.69	3.80	2.06
1.75V/cell	87.1	69.8	58.6	44.7	33.4	26.6	15.3	10.8	8.74	7.18	4.75	3.89	2.11
1.70V/cell	93.7	74.2	61.7	46.7	34.6	27.4	15.6	10.9	8.87	7.30	4.81	3.93	2.14
1.67V/cell	97.2	76.4	63.3	47.6	35.1	28.1	15.7	11.0	8.91	7.30	4.86	3.93	2.15
1.60V/cell	103.7	80.0	65.7	48.9	35.8	28.4	15.9	11.2	9.04	7.39	4.94	4.01	2.17

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

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	140.8	112.8	97.0	75.2	57.5	48.2	27.6	20.5	16.6	13.8	9.13	7.46	3.99
1.80V/cell	153.2	120.6	104.2	79.2	59.8	50.3	28.4	20.8	16.9	13.9	9.21	7.59	4.11
1.75V/cell	159.4	124.0	106.2	81.2	61.0	50.9	28.8	21.1	17.2	14.1	9.34	7.67	4.17
1.70V/cell	166.1	131.1	109.3	83.0	62.2	51.0	29.1	21.4	17.4	14.3	9.46	7.75	4.21
1.67V/cell	173.4	135.9	112.7	85.3	63.6	51.3	29.6	21.5	17.5	14.4	9.50	7.79	4.25
1.60V/cell	178.8	139.0	112.8	86.5	64.3	51.8	29.8	21.7	17.6	14.5	9.58	8.02	4.26

PLH+C-Pure Lead Carbon
PLH+C 40FT (12V38Ah)

LEOCH BATTERY

Applications

- Backup Power
- Grid-connected Energy Storage System
- Off-grid Energy Storage System
- Demand charge reduction
- Time-of-Use bill management

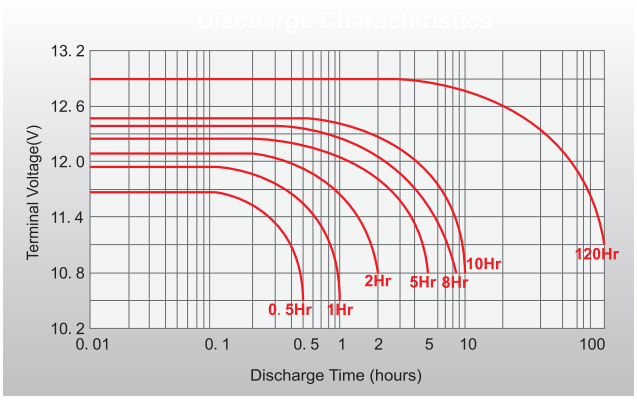
General Features

- High energy density
- Low internal resistance and self-discharge rate
- Excellent fast charging acceptance: 1.5hour to 90% SOC
- Excellent high rate discharge performance in low temperature
- Super high PSoC cycle life

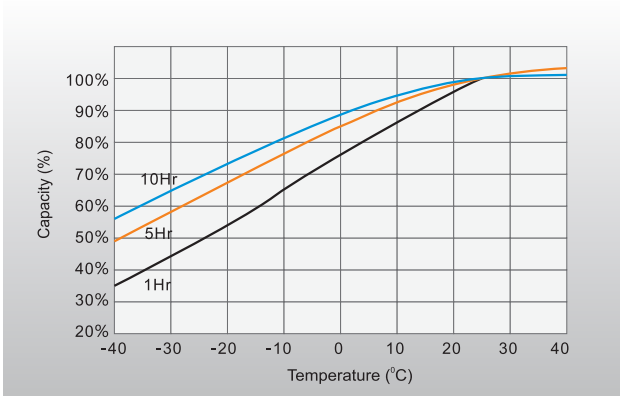
Standards

- Compliance with IEC 60896 standards
- Manufactured in Leoch®IATF16949, OHSAS 18001,ISO 9001 and ISO 14001 certified production facilities

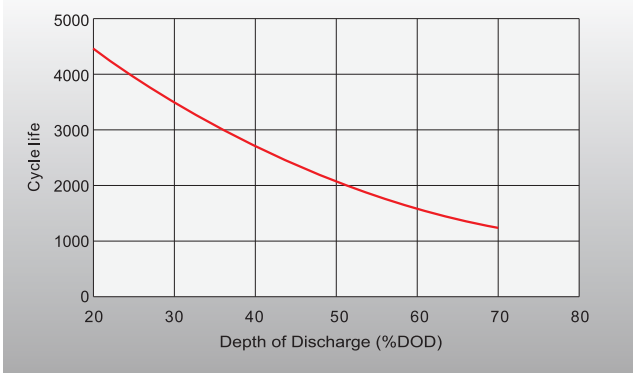
Discharge Characteristics



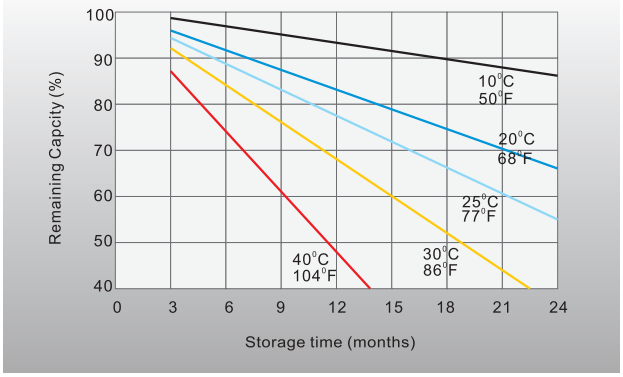
Temperature in Relation to Capacity



Cycle Life vs. Depth of Discharge



Self-discharge Characteristics



Sales Offices Worldwide

China Sales Office
5th Floor, Xinbaohui Bldg., Nanhai Blvd., Nanshan, Shenzhen, China. 518052
Tel: +86-755-86036060 (100 lines)
Fax: +86-755-26067269
E-mail:export@leoch.com

HongKong Sales Office
Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road, Tsuen Wan, New Territories, Hong Kong
Tel: +852 35786666
Fax: +44 1452 690125
E-mail: sales.hk@leoch.com

Singapore Sales Office
No. 1 Tech Park Crescent, Singapore 638131
Tel: +65 68636078
Fax: +65 6863 6079
Email: sales.sg@Leoch.com

Australia Sales Office
2 /29 Tarlington Place, Smithfield. NSW 2164 Australia
Tel: 02 9756 0950
E-mail: sales.au@leoch.com

North America Sales Office
19751 Descartes
Foothill Ranch, CA 92610, USA
Tel: 949-588-5853
Fax: 949-588-5966
E-mail: sales@leoch.us

UK Sales Office
9B Wheatstone Court. Waterwells, Business Park, Gloucester, GL2-2AQ, UK United Kingdom
Tel: +44(0) 1452 729428 / 1452 729696
Fax:+44 1452 690125
E-mail: Sales.Europe@leoch.com

EMEA Sales Office
1 Deligiorgi St., 121 31 Athens, Greece
Tel: +30 210 5760318 (2 lines)
E-mail: support_EMEA@leoch.com

India Sales Office
Shed no.A-53(b), 2nd Stage of Peenya Industrial Area, Bangalore North Taluk, Bangalore-560058, India
Tel: +91-80-23440018/23440019
Fax: +91-80-23440017
E-mail: indiasales@leoch.com

Http://www.leoch.com
Http://www.leoch.us

© 2018 LEOCH. All rights reserved.
Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.
Subject to revisions without prior notice.

Publication No.: LB-PLH+C 40FT-PD-EN-V3.1-201905