



IRON EDISON 4LiFe

Lithium Iron Phosphate (LiFePO₄) Battery

TECHNICAL SPECIFICATIONS

Revised 3/2019



- ✓ Renewable Energy & Backup Power Applications
- ✓ Safest Lithium-Ion Chemistry – LiFePO₄
- ✓ Maximum Compatibility with Industry Standard 48v Equipment
- ✓ Integrated Battery Management System
- ✓ Stackable for Additional / Scalable Energy Storage
- ✓ 10 Year Warranty & Lifetime Technical Support

ELECTRICAL SPECIFICATIONS

	IE48V100	IE48V200	IE48V300
Nominal Voltage	51.2 V	51.2 V	51.2 V
Operating Voltage	44.0 V - 58.4 V	44.0 V - 58.4 V	44.0 V - 58.4 V
Ah Capacity	100Ah	200Ah	300 Ah
Total Energy	5,120 Wh	10,240 Wh	15,360 Wh
Recommended Charge Current	50 A (100 A Max)	100 A (200 A Max)	100 A (200 A Max)
Max Discharge Current	200 A (250 A Peak)	200 A (250 A Peak)	200 A (250 A Peak)
Efficiency	99%	99%	99%
Max Batteries in Series	1	1	1
Max Recommended Batteries in Parallel*	4	4	4

CHARGE SPECIFICATIONS

	IE48V100	IE48V200	IE48V300
Bulk Termination / Absorb Voltage	56.0 V	56.0 V	56.0 V
Recommended Charge Current	50 A (100 A Max)	100 A (200 A Max)	100 A (200 A Max)
Absorb Termination Current	5 A	10 A	15 A
Float Voltage	54.0 V (< 5 hours)	54.0 V (< 5 hours)	54.0 V (< 5 hours)

PHYSICAL SPECIFICATIONS

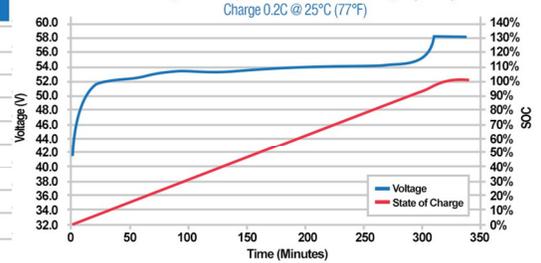
	IE48V100	IE48V200	IE48V300
Dimensions (L x W x H)	30" x 12" x 10"	35" x 15" x 16"	30" x 20" x 17"
Weight	140 lbs.	310 lbs.	400 lbs.
Terminal Type	M10	M10	M10
Terminal Torque	110 - 125 in-lbs.	110 - 125 in-lbs.	110 - 125 in-lbs.
Shipping Classification	UN 3480, Class 9	UN 3480, Class 9	UN 3480, Class 9
Certification (Battery)	CE	CE	CE
Certification (Cells)	UL1642 & IEC62133	UL1642 & IEC62133	UL1642 & IEC62133

CLIMATE SPECIFICATIONS

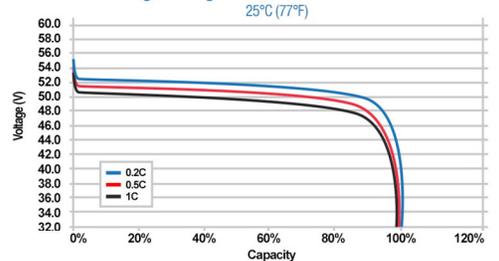
Operating Temperature (Charge)	32°F to 113°F (0°C to 45°C)
Operating Temperature (Discharge)	-4°F to 140°F (-20°C to 60°C)
Storage Temperature	23°F to 95°F (-5°C to 35°C)
Enclosure Rating	IP56 (indoor / outdoor, not waterproof)

- Charging at Recommended Charge Current to Bulk Termination / Absorb Voltage (1-Stage Bulk aka CC) will charge the battery to aprox 95% SoC.
- Charging at Bulk Termination / Absorb Voltage to Absorb Termination Current (2-Stage Bulk+Absorb aka CC/CV) will charge the battery to 100% SoC.
- Equalize charging is not needed or recommended.
- Temperature compensation for charge voltage is not required.
- Reset battery faults by disconnecting battery from all power sources.
- Up to 8 batteries may be connected in parallel under special conditions. Contact Iron Edison for details and design review.

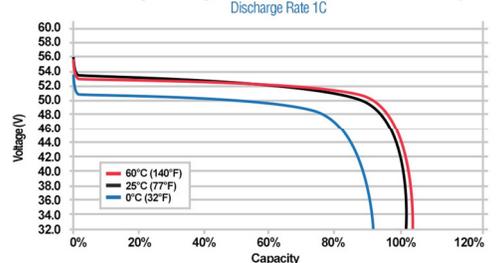
Charge Voltage and State of Charge (SOC)



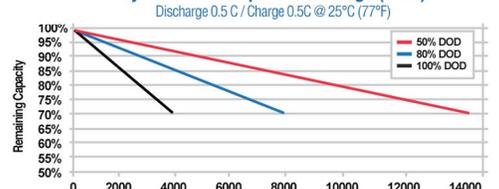
Discharge Voltage Characteristics at Various Rates



Discharge Voltage Characteristics at Various Temps



Cycle Life vs. Depth of Discharge (DOD)



720-432-6433

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