

U1LiFe 12V SERIES Long-life Lithium Iron Phosphate Battery

A highly reliable, robust, longer-life solution for critical care medical carts



When powering your mobile medical cart, you can count on the U1LiFe™ Battery from Inventus Power. U1LiFe Series Batteries exceed the highest set of regulatory standards to provide clinicians with a reliable and safe power solution. They are a lighter weight, drop-in replacement for U1 size, 12 Volt Sealed Lead Acid (SLA) battery applications with the added benefit of an integrated microprocessor to provide host communication (SMBus 1.1), integrated cell and pack protection, and cell balancing circuitry.

Available in three different configurations (U1-40 (491Wh), U1-45 (573Wh) and the powerful U1-50 (655Wh), U1LiFe Series Batteries feature Lithium Iron Phosphate technology, which is the safest and most environmentally-friendly battery chemistry available today. Plus, with a cycle life in the thousands, maintenance time & costs are reduced, thus delivering a low total cost of ownership over the lifetime of the product.

FEATURES


- Lithium Iron Phosphate Technology
- Increased life cycles up to 10 times over Sealed Lead Acid
- Three times the reduction in weight over conventional battery offerings
- Cell-balancing circuitry to increase runtime and battery life
- Integrated cell and pack protection
- Customized safety circuitry, fuel gauges and firmware design
- Multiple communication platforms including I²C & SMBus
- Dual RJ45 Connection Ports
- Applications Include: Patient Monitoring, Mobile & Portable Ultrasound, Medical Carts, Portable X-Ray

Specifications	
Configurations	U1-40: 48 Cells; 4S12P U1-45: 56 Cells; 4S14P U1-50: 64 Cells; 4S16P
Nominal Voltage	12.8 Volts
Nominal Capacity	U1-40: 38.4 Amp Hour (491.52Wh) U1-45: 44.8 Amp Hour (573.44Wh) U1-50: 51.2 Amp Hour (655.36Wh)
Continuous Discharge Current	20 Amps
Pulse Discharge Current	28 Amps < 10 secs 50 Amps < 30 millisecs 110 Amps < 15 millisecs 310 Amps < 827 microsecs (@25°C)
Operating Temperature Range	-20°C to +60°C
Storage Temperature Range	-40°C to +60°C
Maximum Charge Voltage	14.4 Volts
Float Voltage Charge	13.8 Volts
Max Charging Current @ 25°C	20 Amps
Weight	U1-40: 12.95 lbs / 5.87 Kg U1-45: 13.01 lbs / 5.94 Kg U1-50: 14.20 lbs / 6.46 Kg
Dimensions (LxWxH)	209x137x185mm
Communication	SMBus 1.1
Operating Humidity	20% to 80%
Shipping Classification	Class 9
Battery Terminals	1/4-20 Female Thread
Case Flame Rating	UL-94 V-0

Compatible Inverters	
Triplite	HC150SL HCINT150SL HC120DC
PowerVar	ABCE150

Safety / Agency Information	
Certified to the following	UN/DoT 38.3 IEC62133 UL 1642 UL2054 CE Mark

RJ-45 Connector Pin-Out	
Pin 1	GND
Pin 2	RESERVED
Pin 3	RESERVED
Pin 4	RESERVED
Pin 5	RESERVED
Pin 6	SCL
Pin 7	SDA
Pin 8	5V RESERVED



Mechanical