

GUARDIAN

19" 4U LFP Guardian Battery Unit (GBU)



The Guardian Battery Unit (GBU) is a 48V 19" rack-mountable Lithium-ion Battery Backup Unit (BBU) designed to be used in conjunction with the Aspiro and Guardian DC Power Systems. The GBU Series has been designed for data center and telecom applications as a replacement to Lead Acid batteries.

The patented Energy Balance Technology (EBT) provides internal balancing among the GBU modules connected in parallel. The EBT ensures consistent voltage and current delivery from the entire system of connected modules, which maximizes run-time and power delivery.

Remote management via Ethernet with the Unipower GCC Controller with PowCom™ software provides immediate access to performance and alarm information.

Lithium Iron Phosphate chemistry provides superior power delivery, as well as the longest cycle and calendar life.

Features

- 4RU High with 150 AHr of capacity
- 19-Inch Rack Mounting
- Current Capacity: 100A
- Operating Voltage: 48VDC
- Scalable connect multiple units in Parallel
- RS-485 Communication Ports



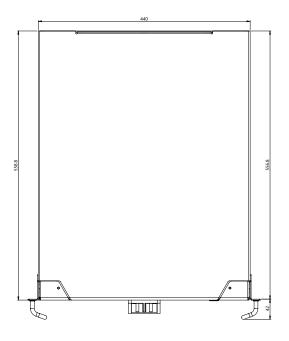
Advantages

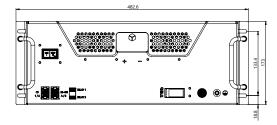
- Energy Balance Technology (EBT) When more than one Guardian Battery Unit (GBU) is connected in parallel, internal balancing among the GBU modules ensures consistent voltage and current delivery from the entire system of connected modules. The EBT function maximizes the run-time and power delivery for the entire system.
- Lithium Iron Phosphate battery chemistry offer many benefits compared to traditional lead-acid batteries and other lithiumion batteries, including NMC and LCO based solutions;
 - Long Cycle Life and Calendar Life
 - · No Maintenance
 - Extremely Safe
 - Wide Temperature Range
 - Improved Discharge & Charge Efficiency
 - Consistent Voltage and Current Delivery



Guardian Battery Unit Specifications

	Guardian Battery Unit (GBU) 4U
lectrical Parameters	
ithium-Ion Chemistry	Lithium Iron Phosphate
Nominal Voltage	48 Volts
Voltage Range	42.7 - 54.8 Volts
Nominal Capacity	150 AHr (7200 Wh)
Continuous Discharge Current	100 A
Pulse Discharge Current	115A for 300mS
Quiessentient Current Draw	TBD
Maximum Input Voltage	58 Volts
fin/Max Charge Current Range	3 - 100 A
Cell Balancing	300 mA
Maximum in Parallel Operation	10 units
Physical Parameters	
erminals	Four threaded receptacles, M6 bolt pattern
imensions	440mm x 558.8mm x 173mm
'eight	70kg (154 lbs)
Communications and Control	
erial Communication	ModBus over RS485
Network Communication	SNMP and CLI over Ethernet
invironmental	F9/ to OF9/ non condension
Operating Humidity	5% to 95% non-condensing
harge Temperature Range	0 to +45 °C
ischarge Temperature Range	-5 to +50 °C
hermal Management	Variable Speed Fan
irflow Direction	Back to Front
Rating	IP 20
pprovals and Safety	
gency Approvals	UN 38.3, UL 1973, IEC 62368
adiated and Conducted Emission	EN55032 / CISPR 22 Class A
*Calendar Life @ 80% SOC	Up to 20 Years
Cycle Life @ 80% SOC	4000 Cycles
Battery Modes	Battery modes - Ship and active
Shipping Classifications	Class 9





Dimensions in mm



ABOUT GREEN CUBES TECHNOLOGY

RS-485 Management Port

*Max voltage applied to terminal ** Fan is replacement part

Green Cubes Technology harnesses over 30 years of industry experience to ensure we design, develop and deliver solutions for the most challenging energy needs. We offer battery technology innovation, application design and performance management to drive productivity, scalability and sustainability.

For more information, email ${\bf contact@greencubestech.com}$ or visit ${\bf greencubestech.com}$

