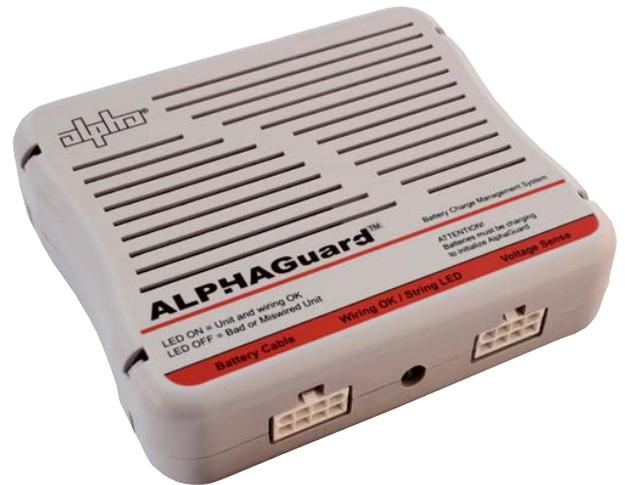


Power

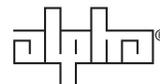
AlphaGuard™

Battery Charge Management System



- Extends battery life
- Replace single batteries, not the entire string
- Spreads charge voltage equally across batteries
- Compensates for battery differences as they age
- Optional status-monitoring communications-interface modules
- Safe unattended operation designed to CSA C22.2 No. 107.1 and UL 1778 Standards

AlphaGuard monitors and protects your batteries by spreading the charge voltage equally across all the batteries in the string, ensuring that every battery, whether old or new, is properly charged. With an ideal voltage always across each battery, life and runtime are optimized. Individual batteries in a string can be replaced as they fail, allowing batteries to be left in service longer. This stops the wasteful and costly practice of replacing batteries based on a scheduled maintenance programs or disposing of batteries that may have years of useful life left because one battery has failed.



AlphaGuard

The AlphaGuard employs a patented Charge Management Technology (CMT) to shuttle excess charge current to batteries requiring a greater charge, and is contained in a small plastic enclosure that installs directly on top of one of the batteries in the string. A short service cable connects the AlphaGuard to each of the batteries in the string. Both 36VDC (3 battery) and 48VDC (4 battery) versions are available. One AlphaGuard is required per string.

An AlphaGuard configured with the optional voltage sense cabling and interface module (DSM, ESM, EDSM or External DOCSIS®) allows the AlphaGuard to interface with a status-monitoring module. Two AlphaGuard modules can be connected to an interface module. Refer to individual interface module documentation for additional information.

Models

AG-CMT-3: AlphaGuard Charge Management SC, 36V String—including 36VDC battery interface cable
AG-CMT-4: AlphaGuard Charge Management SC, 48V String—including 48VDC battery interface cable

Specifications

Configuration

Quantity: One (1) AlphaGuard is required per battery string
Service Location: With the battery string

Cabling

AG-S9-Cable: AG-CMT-36/48SC Voltage Sense Cable, Single String, 9'
AG-D9-Cable: AG-CMT-36/48SC Voltage Sense Cable, Two String, 9'
AG-S35-Cable: AG-CMT-36/48SC Voltage Sense Cable, Single String, 35'
AG-D35-Cable: AG-CMT-36/48SC Voltage Sense Cable, Two String, 35'



AlphaGuard Enclosure



AG-DSM-S9-Cable



AG-DSM-D9-Cable



AG-DSM-D35-Cable



AG-DSM-S35-Cable

Mechanical

Housing Material: High impact plastic
Dimensions (in): 1.44H x 4.82W x 4.25D
(mm): 36H x 122W x 108D
Weight (lb): 0.8
(kg): .36

Electrical

Batteries: Individual 12VDC nominal batteries configured into 36 or 48VDC strings
Circuit Protection: Single blow fuse, reverse polarity protected
Environmental: -40 to 55°C (-40 to 131°F), 5 to 95% humidity
Quiescent Current Draw: 1mA max. (Current consumed by AlphaGuard after low voltage total shutdown)
Charge Management: Most effective during float period of charge
Max. Current: 2A @ 25°C
Quality of Final Balance: ±100mV max. between any two (2) batteries
Charging Efficiency: 80 to 90%
Charge Balance: ±100mV typical
Low Voltage Cutoff: 34.5VDC/46VDC ±5%
Communication to XM2: AlphaGuard configured DSM status monitoring card
Voltage Sense Regulation: ±100mV



Battery Ring Lug



Battery Cable 36V 6ft

Battery Cable 48V 6ft

Warranty

5 years

For more information visit www.alpha.com

Alpha Technologies United States Bellingham, Washington Tel: 360 647 2360 Fax: 360 671 4936
Canada Burnaby, British Columbia Tel: 604 430 1476 Fax: 604 430 8908

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