

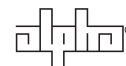
Power AlphaGuard™

Potted Battery Charge Management System
for Below Grade Applications



- Extends life of batteries installed below grade
- Replace only 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

AlphaGuard monitors and protects your batteries by spreading the charge voltage equally across all the batteries in a string, ensuring that every battery in the string, whether old or new, is properly charged. With an ideal voltage consistency 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 program or disposing of batteries that may have years of useful life left because one battery in a string fails. The Potted Alpha Guard model is ideal for applications where batteries are installed below grade and subject to damp conditions or possible immersion.



AlphaGuard

The AlphaGuard employs a patented Charge Management Technology (CMT) to shuttle excess charge current from one battery to another battery requiring a greater charge. The AlphaGuard is a small plastic enclosure that installs directly on top of the battery 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 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

012-306-30-001 AG CMT-3SC-P-C AlphaGuard 36VDC, Potted with 6ft sense wires
012-306-32-001 AG CMT-3SC-P AlphaGuard 36VDC, Potted without sense wires
012-306-31-001 AG CMT-4SC-P-C AlphaGuard 48VDC, Potted with 6ft sense wires
012-306-33-001 AG CMT-4SC-P AlphaGuard 48VDC, Potted without sense wires

The sense wires are preconnectorized and 6ft in length. The 6ft length allows connection to one of the four extension cables shown below.

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'



Mechanical

Housing Material: High impact epoxy
Dimensions (in/mm): 1.44H x 4.82W x 4.25D/ 36H x 122W x 108D
Weight (lb/kg): 1.5/.67



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 communications card



Warranty

5 years

For contact information visit www.alpha.com

The Alpha Group >

Europe, Middle East & Africa	Asia Pacific	North America	Latin & South America
Cyprus Tel: +357 25 375 675 Fax: +357 25 359 595 Russia Tel: +7 495 916 1854 Fax: +7 495 916 1349	Germany Tel: +49 9122 79889 0 Fax: +49 9122 79889 21 Lithuania Tel: +350 5 210 5291 Fax: +350 5 210 5292 United Kingdom Tel: +44 1279 501110 Fax: +44 1279 659870	P.R. China Tel: +852 2736 8663 Fax: +852 2199 7988 Canada Tel: +1 604 430 1476 Fax: +1 604 430 8908 USA Tel: +1 360 647 2360 Fax: +1 360 671 4936	Contact USA office