

Next-Generation **POWER**



Alpha XM3V-HP CableUPS®

The **POWER** of Intelligence



➤ *Total Power Solutions*



Next-Generation POWER

From ground-breaking transformer design improvements to the integration of the most intuitive and user-friendly interface in the industry, the Alpha XM3V-HP CableUPS® incorporates significant technological advancements across the entire power technology platform, and sets the new standard in **intelligent power management**.

These advancements focus on delivering three primary benefits:

Improved Efficiency | Optimized Performance | Reduced Operating Costs

AlphaGuard™

Embedded battery balancing to maximize battery life and optimize performance.

Advanced Ferro Technology

Maximum power efficiency under all modes of operation.

AlphaApps

Intelligent diagnostics for remote preventative maintenance of the batteries and power supply.

Advanced Battery Management

Dynamic 5-stage charger technology maximizes AlphaCell® battery life.



AlphaPOP, Three Output Options

4 Coax, 2 Coax + 2 Terminal Block, 4 Terminal Block.

Alpha Smart-Display

Four-line display with intelligent, virtual keypad for optimal provisioning and diagnostics.

AlphaNet™ DOCSIS®-Based Communications

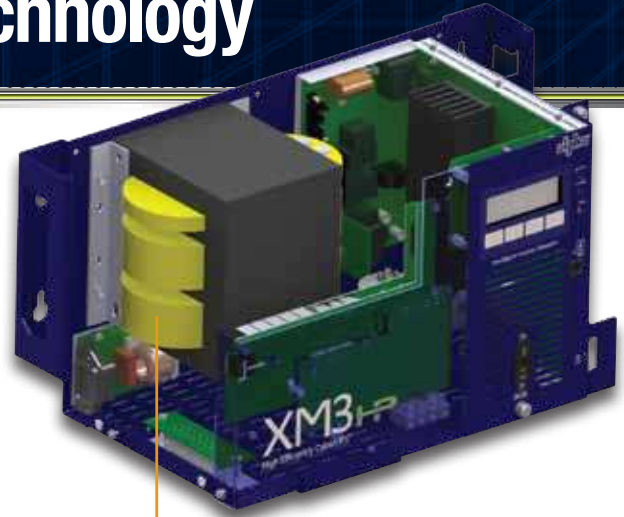
Intelligent monitoring and power system management.



Advanced Efficiency Technology

The Alpha XM3V-HP **triple efficiency** ferro technology optimizes the power supply's performance resulting in significantly reduced utility power consumption and a direct savings in network operating costs.

e³



Exclusive, Patent-Protected Transformer Design.

➤ Highest Line Mode Efficiency.

The XM3V-HP offers the highest line mode efficiency available, requiring less AC utility power to support a load.

$$\text{Utility Power (kW)} = \left(\frac{P_{\text{Network Load}} + \sum \left[\left(\frac{P @ \text{Active}}{V @ \text{Active}} \right)^2 \times \Omega_{\text{Feet of cable}} \times \text{Feet Distance} \right]}{\text{Power Supply Efficiency}} \right)$$

Cable Power Loss — I²R

➤ Tightest Output Voltage Regulation.

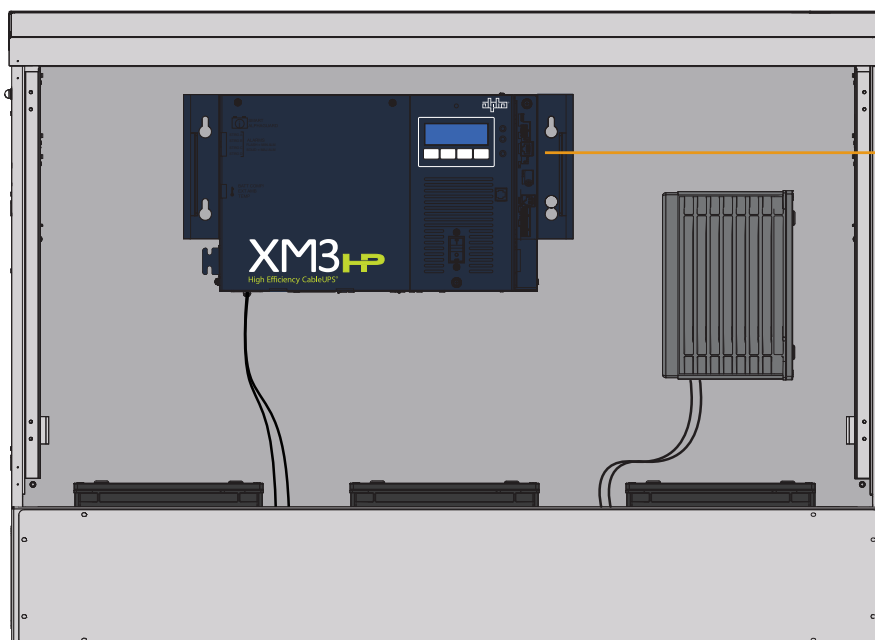
Alpha's XM3V-HP provides the tightest output voltage regulation ever offered to reduce I²R cable power losses.

➤ Maximum Inverter Efficiency.

Significant gains in inverter efficiency directly translates into increased battery runtimes, further improving network performance and power outage recovery capabilities.

➤ Wall Mountable XM3 Platform

Cable TV Ground Mount Enclosure



Vertical Mount Flange

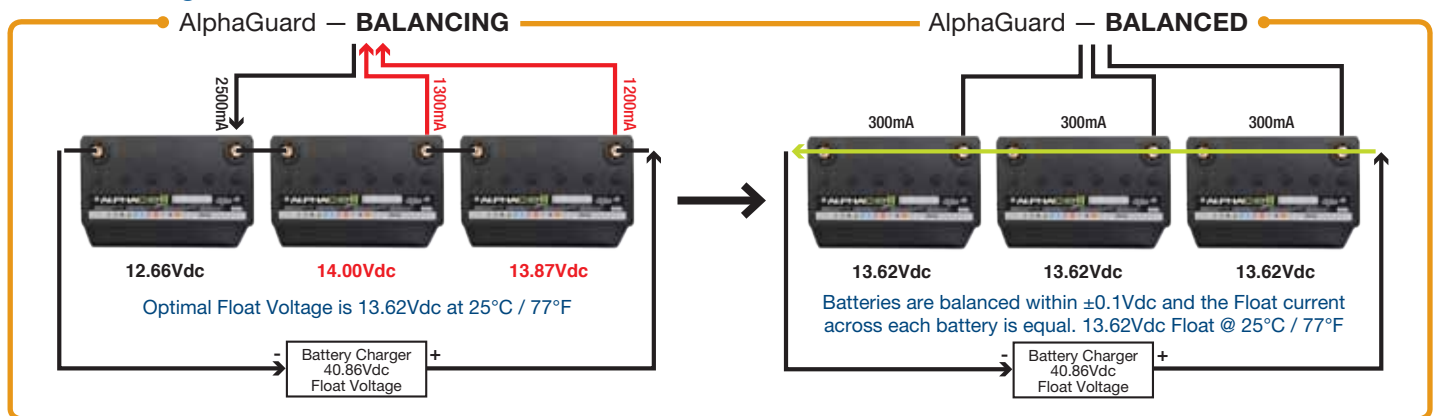
Advanced Battery Management

The Alpha XM3V-HP's Advanced Battery Management optimizes battery life and contributes to both **reducing capital expenditures** and **on-going operating costs**.

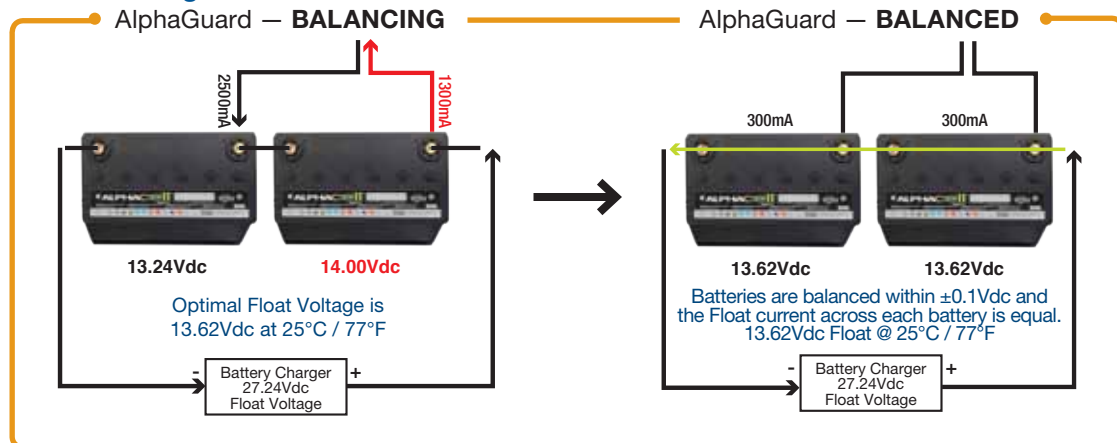
► Embedded Battery Balancing.

The Alpha XM3V-HP embedded AlphaGuard uses advanced battery balancing technology to re-direct current from overcharged batteries to the undercharged battery, optimizing battery service life.

36 Volt String



24 Volt String



► Dynamic Multi-Stage Charging.

The Alpha XM3V-HP's dynamic 5-stage battery charging technology provides system batteries with optimal charge management.

Refresh | Bulk | Accept | Float | Rest



Advanced AlphaCell® Battery Technology

Advanced Intelligence Platform

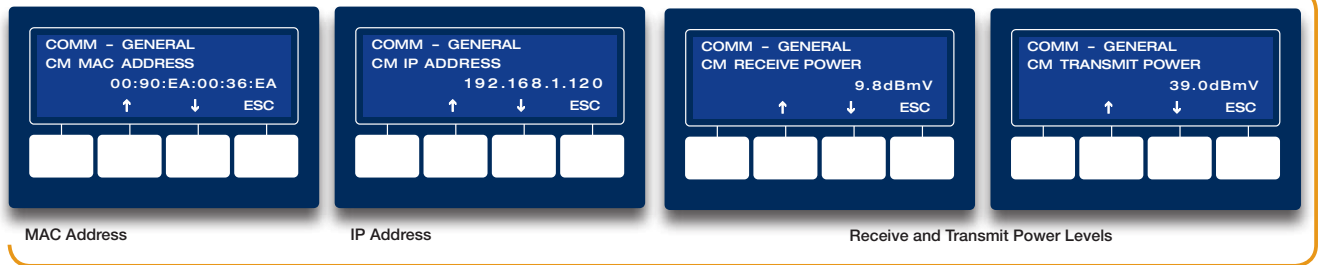
The Alpha XM3V-HP's internal intelligence provides Network Operation Centers (NOC) with the critical and highly relevant data necessary to **reduce operating expenses** through remote management of the power network.



► Embedded DOCSIS® Communications.

The **XM3V's** AlphaNet™ Integrated DOCSIS Communications Platform enables access to all of the XM3V's advanced information and diagnostics through a standard (SNMP) network interface.

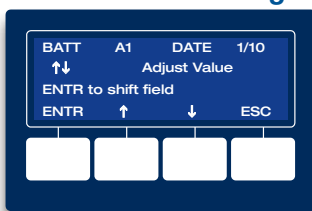
DOCSIS® Communications Menu



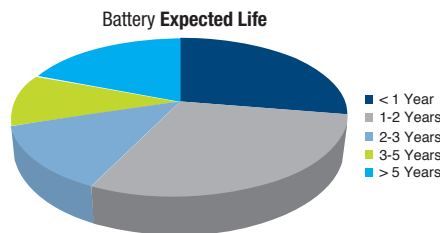
► Embedded Alpha Applications.

Power reliability algorithms use real-time data to predict service intervals and battery replacements.

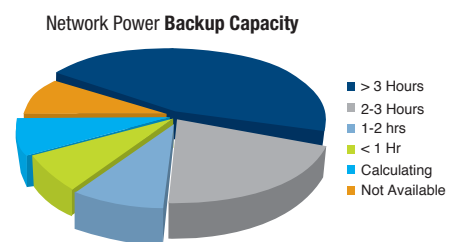
Enter Battery Date Code & MHOs Reading



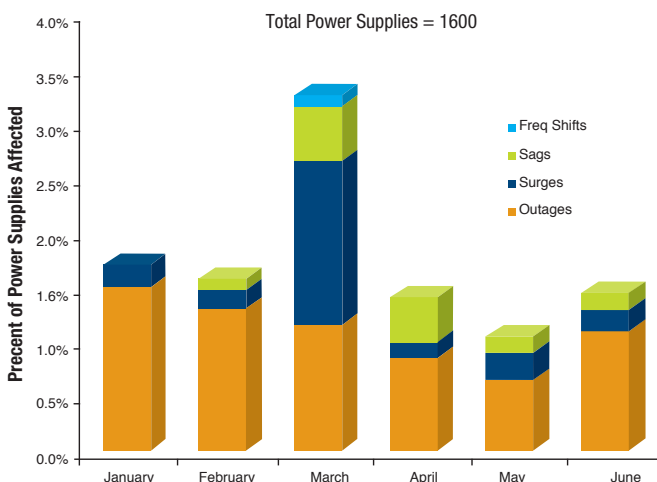
Battery Health



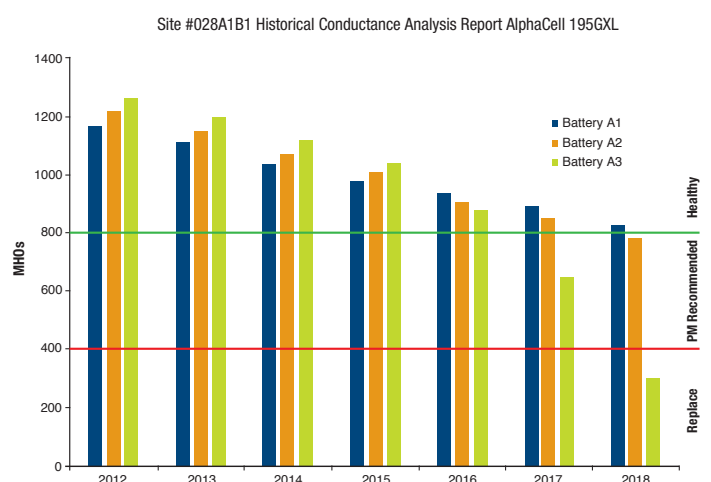
Battery Remaining Runtime



Utility Performance Reports



Battery MHOs Trending



XM3V-HP Models:	608CE-HP	608CE-HP-24	618CE-HP	618CE-HP-24	912E-HP	912E-HP-24	906E-HP	906E-HP-24
Parameters								
Nominal AC Input Voltage (VAC):	230	230	230	230	200-240	200-240	200-240	200-240
Nominal Input Frequency (Hz):	50	50	50	50	50	50	50	50
Input Frequency Tolerance (%):	±3	±3	±3	±3	±3	±3	±3	±3
Input Voltage Operating Range Tolerance (%):	-30 / +20	-30 / +20	-30 / +20	-30 / +20	-30 / +20	-30 / +20	-30 / +20	-30 / +20
Output Voltage (VAC, Quasi-square wave):	63	63	63	63	89	89	89	89
Output Voltage Regulation:	-3.5 / +1.5	-3.5 / +1.5	-3.5 / +1.5	-3.5 / +1.5	-5 / +1	-5 / +1	-5 / +1	-5 / +1
Maximum Rated Output Current (A):	8	8	18	18	12	12	6	6
Maximum Output Power (VA):	504	504	1134	1134	1068	1068	534	534
Line Mode Efficiency (%):	Up to 94	Up to 94	Up to 94	Up to 94	Up to 94	Up to 94	Up to 94	Up to 94
Standby Efficiency (%):	Up to 91	Up to 91	Up to 91	Up to 91	Up to 91	Up to 91	Up to 91	Up to 91
Bulk Charger Current (Amps @ 80% Load & Nom line):	6	6	10	10	10	10	6	6
Battery Voltage (VDC):	36	24	36	24	36	24	36	24

Mechanical								
Inverter Module:	Front plug in, hot swappable inverter module							
Dimensions H x W x D (mm):	198.1 x 381 (424.18 w/handle) x 254 (271.8 w/handle)							
Weight (kg):	23.8	23.8	28.8	28.8	28.8	28.8	23.8	23.8
Input Power Connector:	IEC 320/C20	IEC 320/C20	IEC 320/C20	IEC 320/C20	IEC 320/C20	IEC 320/C20	IEC 320/C20	IEC 320/C20
Battery Connector:	Anderson style 75A	Anderson style 75A	Anderson style 75A	Anderson style 75A	Anderson style 75A	Anderson style 75A	Anderson style 75A	Anderson style 75A
Remote Temp Sensor:	Ring lug fastens to negative terminal on center battery							
Display:	4 Line by 20 character LCD with soft-key menu controls							
LRI Connector:	Anderson PP30's	Anderson PP30's	Anderson PP30's	Anderson PP30's	Anderson PP30's	Anderson PP30's	Anderson PP30's	Anderson PP30's
Mounting:	Shelf mounts inside suitably rated electrical enclosure							

Environment								
Operating Temperature (°C):	-40-60 (derate by 2°C per 304.8 m above 914.4 m)							
Storage Temperature (°C):	-40-70	-40-70	-40-70	-40-70	-40-70	-40-70	-40-70	-40-70
Humidity (%):	0-95 non-condensing (relative)							
Conformal Coating:	All printed circuit board assemblies to prevent moisture related failure							

Safety Compliance								
EN 60728-11:	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A
IEC 60950-1 (CB):	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IEC 62040-1:	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A
Safety Mark:	CE	CE	CE	CE	N/A	N/A	N/A	N/A

EMC Compliance								
IEC/EN 50083-2 (CATV):	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A
IEC/EN 65040-2 (UPS):	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A
CISPR22:	N/A	N/A	N/A	N/A	Yes	Yes	Yes	Yes



Worldwide Corporate Offices

Headquarter Germany

Hansastraße 8
D-91126 Schwabach
Tel: +49 9122 79889 0

Mail: info@alpha-outback-energy.com

Eastern Europe

ee@alpha-outback-energy.com

Middle East

me@alpha-outback-energy.com

France and Benelux

fbnl@alpha-outback-energy.com

Spain

spain@alpha-outback-energy.com

Africa

africa@alpha-outback-energy.com

Alpha and Outback Energy GmbH reserves the right to make changes to the products and information contained in this document without notice. Copyright © 2020 Alpha and Outback Energy GmbH. All Rights reserved.

For more information please visit www.alpha-outback-energy.com