

Next-Generation **POWER**



Alpha XM3-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 XM3-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.



Alpha DOC

Dual Output Controller provides two programmable outputs from a single XM3.

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 XM3-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.



Exclusive, Patent-Protected Transformer Design.

> Highest Line Mode Efficiency.

The XM3-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 — I^2R

> Tightest Output Voltage Regulation.

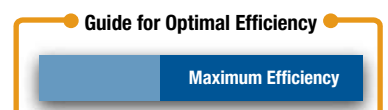
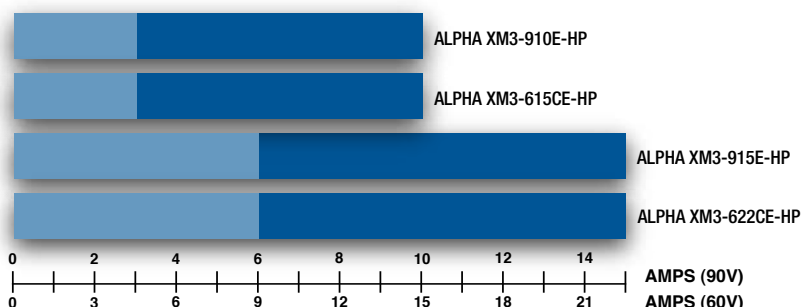
Alpha's XM3-HP provides the tightest output voltage regulation ever offered to reduce I^2R cable power losses.

> Maximum Inverter Efficiency.

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

Load Optimization.

The XM3-HP is available in several models to best match network load requirements.

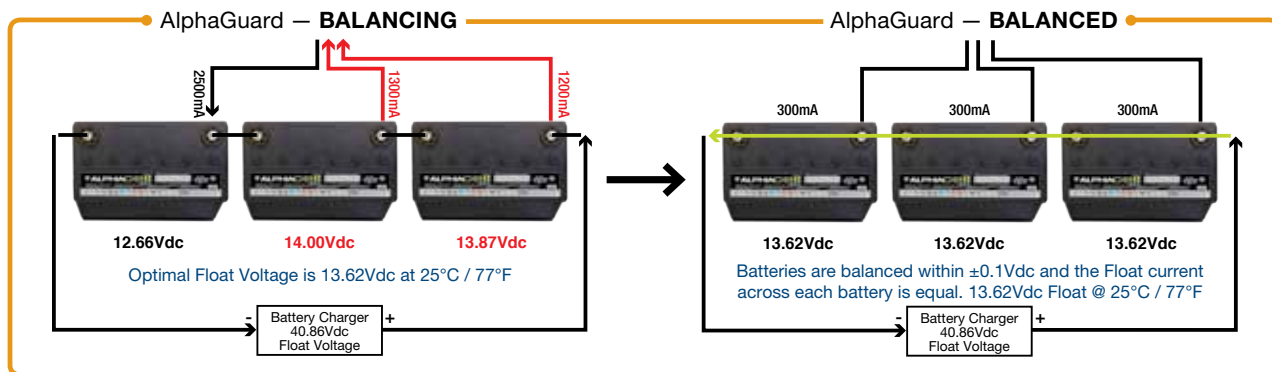


Advanced Battery Management

The Alpha XM3-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 XM3-HP embedded AlphaGuard uses advanced battery balancing technology to re-direct current from overcharged batteries to the undercharged battery, optimizing battery service life.



➤ Dynamic Multi-Stage Charging.

The Alpha XM3-HP's dynamic 5-stage battery charging technology provides system batteries with optimal charge management.

Refresh • Bulk • Accept • Float • Rest



Advanced AlphaCell® Battery Technology



➤ Extended Runtime.

The XM3-HP's advanced battery management and increased inverter efficiency maximizes battery runtime in the network.

XM3 AlphaCell® Typical Runtime (minutes)														
90Vac @	4A		6A		8A		10A		12A		14A		16A	
Model:	3.5HP	4.0HP	3.5HP	4.0HP	3.5HP	4.0HP	3.5HP	4.0HP	3.5HP	4.0HP	3.5HP	4.0HP	3.5HP	4.0HP
3 Batteries:	540	588	358	394	263	295	204	234	165	193	137	164	116	142
6 Batteries:	1144	1264	771	841	574	624	450	491	368	404	308	342	264	295
Model:	195GXL	220GXL	195GXL	220GXL	195GXL	220GXL	195GXL	220GXL	195GXL	220GXL	195GXL	220GXL	195GXL	220GXL
3 Batteries:	476	550	313	363	229	265	177	205	142	164	118	136	99	115
6 Batteries:	1026	1177	685	789	506	585	396	458	322	373	269	311	229	266

Advanced Intelligence Platform

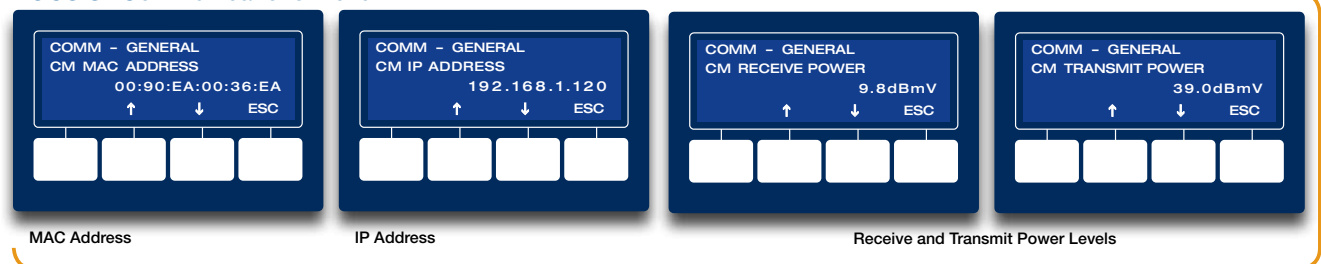
The Alpha XM3-HP's internal intelligence provides Network Operation Centers (NOC) with the critical and highly relevant data necessary to **reduce operating expenses** through remote management of the power network.



Embedded DOCSIS® Communications.

The **XM3's AlphaNet™ Integrated DOCSIS Communications Platform** enables access to all the XM3's advanced information and diagnostics through a standard (SNMP) network interface.

DOCSIS® Communications Menu

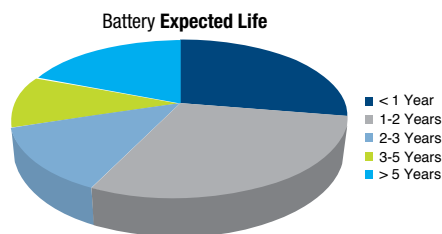


Embedded Alpha Applications.

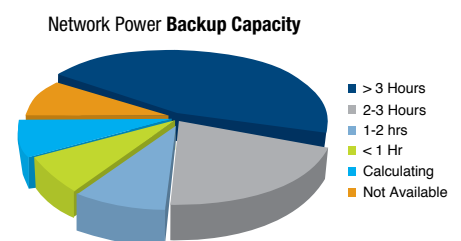
Power reliability algorithms uses real-time data to predict service intervals and battery replacements.

Enter Battery Date Code & MHOs Reading

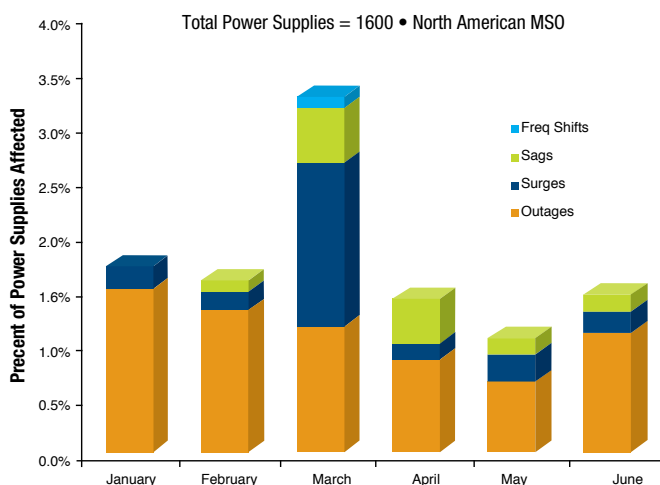
Battery Health



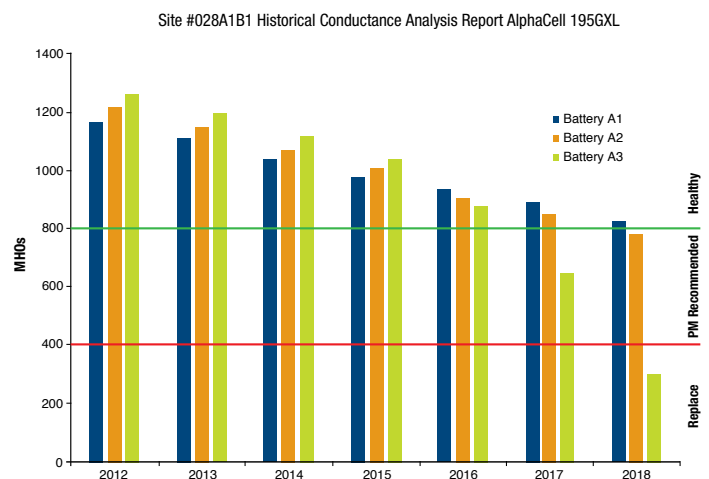
Battery Remaining Runtime



Utility Performance Reports



Battery MHOs Trending



XM3-HP CableUPS® European Specifications

XM3 CableUPS European Models				
Models:	910E-HP	915E-HP	615CE-HP	622CE-HP
Parameters				
Nominal AC Input Voltage (Vac)	200-240	200-240	230	230
Nominal Input Frequency	50Hz	50Hz	50Hz	50Hz
Input Frequency Tol (%)	±3	±3	±3	±3
Input Voltage Operating Range Tolerance (%)	-25/ +20	-25 / +20	-25 / +20	-25 / +20
Output Voltage (Vac)	63 / 89	63 / 89	63	63
Output Voltage Regulation	-2.5 / +1	-2.5 / +1	-3.5 / +1.5	-3.5 / +1.5
Maximum Rated Output Current	10 Amps	15 Amps	15 Amps	22 Amps
Output Power (VA)	900	1350	900	1408
Line Mode Efficiency	Up to 94%			
Standby Efficiency	Up to 91%			
Bulk Charger Current (@ 80% Load & Nom line)	10 Amps	10 Amps	10 Amps	10 Amps
Battery Voltage (Vdc)	36	36	36	36*

* XM2-622CE will continue as a 48V model until further notice.

Mechanical				
Inverter Module	Front plug in, Hot swappable inverter module			
Dimensions H x W x D (in/mm)	7.8 x 15 (16.7 w/handle) x 10 (10.7 w/handle) / 198.1 x 381 (424.18 w/handle) x 254 (271.8 w/handle)			
Weight (lb/kg)	53 / 24.1	67 / 30.5	53 / 24.1	67 /30.5
Input Power Connector	IEC 320/C20			
Battery Connector	Anderson style 75A			
Remote Temp Sensor	Ring lug fastens to negative terminal on center battery			
Display	4 Line by 20 Character Blue LCD with soft-key menu controls			
LRI Connector	Anderson PP30's			
Mounting	Shelf mounts inside suitably rated electrical enclosure			
Environment				
Operating Temperature	-40 to 60°C / -40 to 140°F (derate by 2°C / 3.6°F per 1000 feet above 3000 feet)			
Storage Temperature	-40 to 70°C / -40 to 158°F			
Humidity	0 to 95% non-condensing (relative)			
Conformal Coating	All Printed Circuit Board assemblies to prevent moisture related failure			

Models:	910E-HP	915E-HP	615CE-HP	622CE-HP
Name Plate Rating (Vac)	200-240	200-240	230	230
Input Window +/- (% of Nominal Input)	-25 / +20	-25 / +20	-25 / +20	-25 / +20
Input Range (Vac)	173-276	173-276	173-276	173-276
Output Regulation +/- (%)	-2.5 / +1	-2.5 / +1	-3.5 / +1.5	-3.5 / +1.5
Load Range	1-10A	1-15A	1-15A	1-22A
Output Voltage Min / Max (Vac)	86.8 / 90	86.8 / 90	60.8 / 64	60.8 / 64
Safety Compliance				
UL/CSA 60950-1, UL 1778, CSA 107.3 (NRTL/C)				
IEC 60950-1 (CB)	Y	Y	Y	Y
IEC 62040-1			Y	Y
Safety Mark			CE	CE
EMC Compliance				
FCC Part 15 Class A				
IEC/EN 50083-2 (CATV)			Y	Y
IEC/EN 65040-2 (UPS)	Y	Y	Y	Y
CISPR22	Y	Y	Y	Y

Alpha Technologies



www.alpha.com

Worldwide Corporate Offices

USA

Tel: +1 360.647.2360
Fax: +1 360.671.4936

Canada

Tel: +1 604.436.5900
Fax: +1 604.436.1233

Europe

Tel: +49 9122.79889.0
Fax: +49 9122.79889.21

Latin America

Tel: +561 792.9651
Fax: +561 792.7157

Asia

Tel: +852 2736.8663
Fax: +852 2199.7988

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