

# **XM3-HP CableUPS®**

NEXT GENERATION POWER



**NEW  
PRODUCT**



## The POWER of Intelligence

➤ *Total Power Solutions*



RELIABILITY



INTELLIGENCE



SUSTAINABILITY



EFFICIENCY

# 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

### 1 AlphaGuard™

Embedded battery balancing to maximize battery life and optimize performance.

### 2 Advanced Ferro Technology

Maximum power efficiency under all modes of operation.

### 3 AlphaApps

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

### 4 Advanced Battery Management

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



### 6 Alpha DOC

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

### 5 Alpha Smart-Display

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

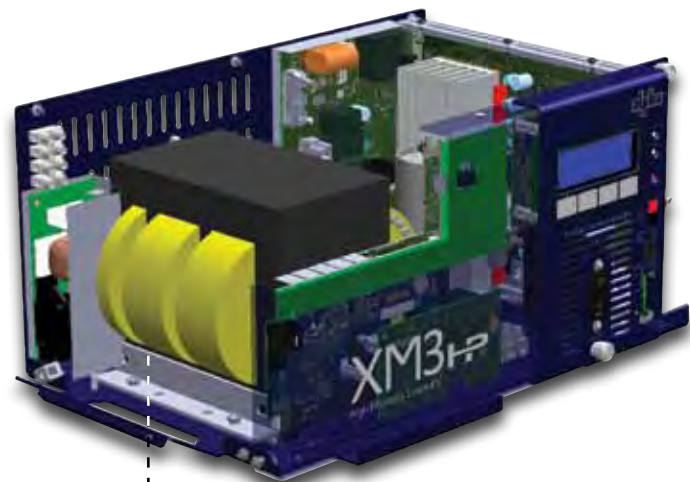
### 7 AlphaNet™ DOCSIS®-Based Communications

Intelligent monitoring and power system management.



# Advanced Efficiency Technology

The Alpha XM3-HP's patent-protected Advanced Ferro Technology optimizes the ferroresonant transformer's performance, providing ground-breaking **efficiency** ratings, improved **protection** levels and the **tightest output voltage regulation** ever offered.



- Exclusive, Patent-Protected Transformer Design.

## ➤ Highest Utility Efficiency.

The Alpha XM3-HP provides the **highest output voltage regulation** and the **highest line-mode efficiency** available.

Cable Power Loss— $I^2R$

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

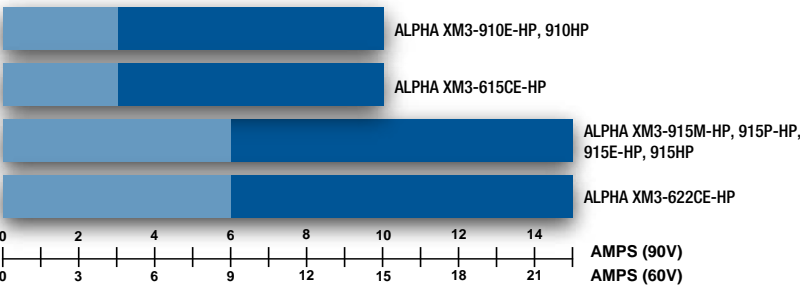
## ➤ Maximum Inverter Efficiency.

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

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

## ➤ Load Optimization Efficiency.

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

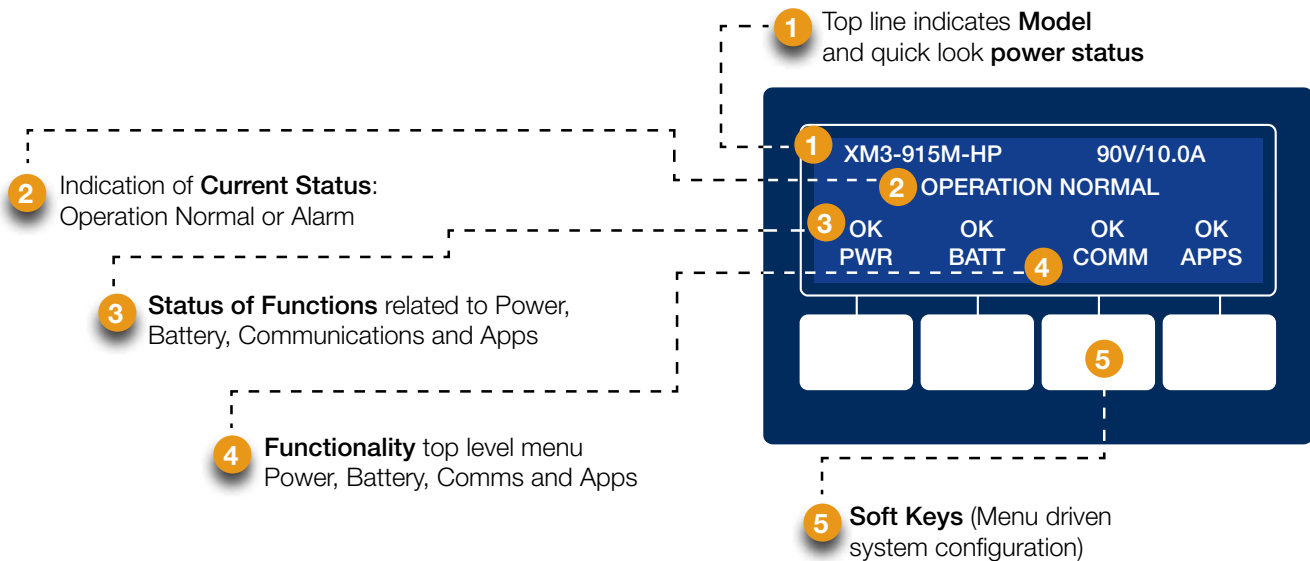


Guide for Optimal Efficiency

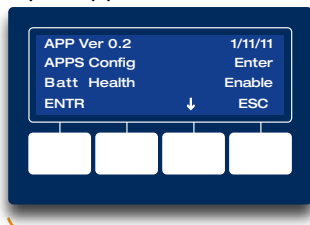
Maximum Efficiency

# Alpha Smart-Display

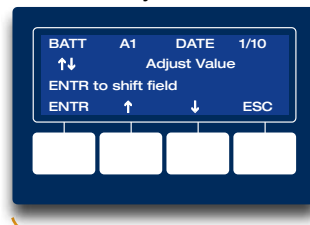
The Alpha XM3-HP CableUPS® comes standard with the most intuitive interface ever offered. Its four-line display includes a soft-key menu-driven system that allows users to quickly input and view critical data.



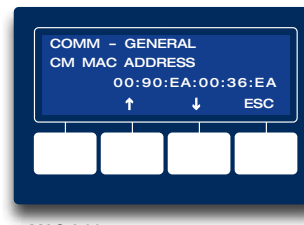
## AlphaApps™ Menu



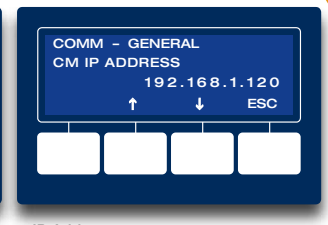
## Enter Battery Date Code



## DOCSIS® Communications Menu

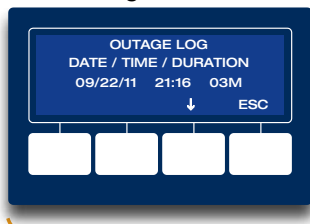


MAC Address

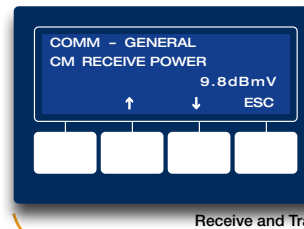
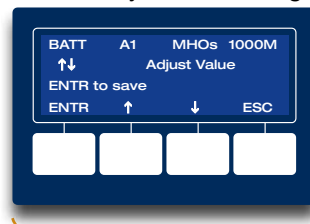


IP Address

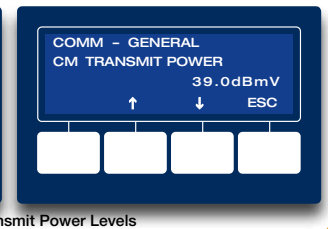
## View Outage Details



## Enter Battery MHOs Reading



Receive and Transmit Power Levels



# Advanced Battery Management

Optimizing battery life can also have a dramatically positive effect on both **reducing capital expenditures** as well as **reducing on-going operating expenses**. The XM3-HP's advanced battery management technology can increase battery life by 20 percent.



Advanced AlphaCell™ Battery Technology

## Dynamic Multi-Stage Charging.

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

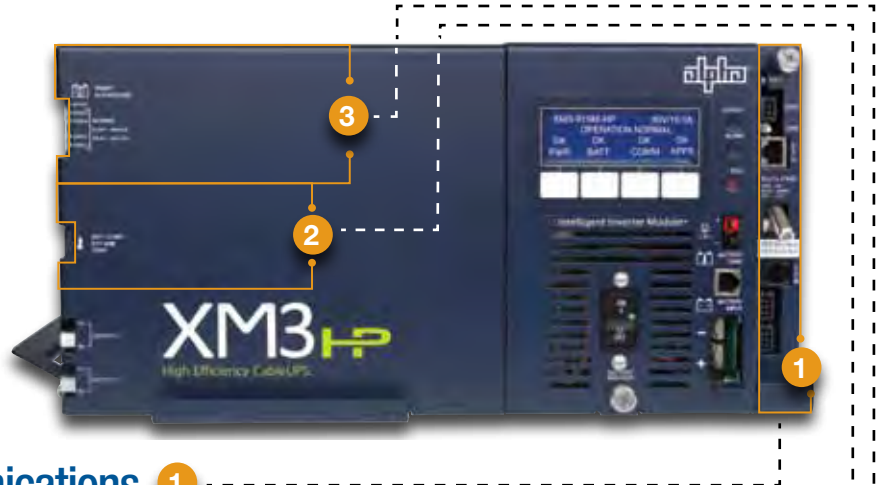
**Refresh • Bulk • Accept • Float • Rest**





# Advanced 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** and **optimize the power** component of the network.



## ➤ Embedded DOCSIS® Communications. 1

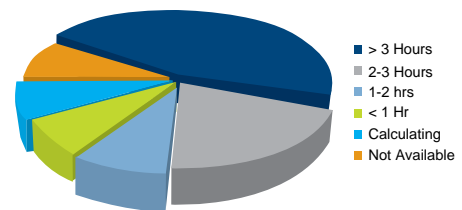
The **XM3's AlphaNet™ Integrated DOCSIS Communications Platform** enables access to all the XM3's advanced information and diagnostics through a standard Simple Network Management Protocol (SNMP) network interface.

## ➤ Embedded Alpha Applications. 2

Power reliability algorithms using real-time data allow users to predict service intervals and battery replacement schedules.

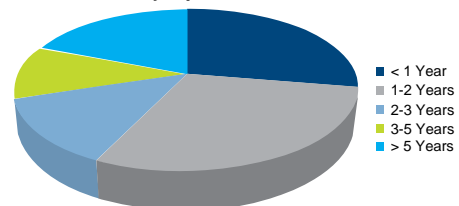
### Battery Remaining Runtime

Network Power Backup Capacity



### Battery Health

Battery Expected Life



### Critical Parameters

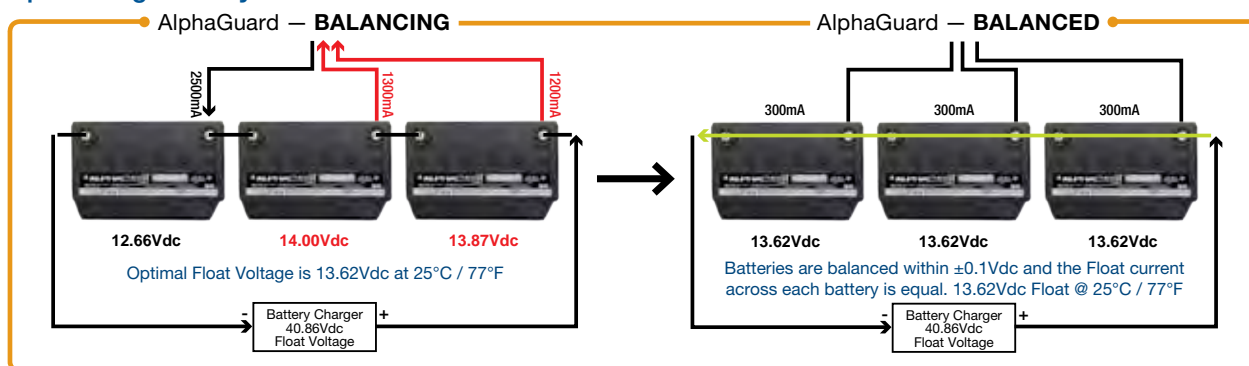
Battery Remaining Runtime

Battery Remaining Life Expectancy

Utility Performance Reports

## ➤ Embedded Battery Balancing. 3

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



# XM3-HP CableUPS® International Specifications

XM3 CableUPS International Models										
Models:	915M-HP	915P-HP	910E-HP	915E-HP	615CE-HP	622CE-HP	908HP	910HP	915HP	918HP
<b>Parameters</b>										
Nominal AC Input Voltage (Vac)	127	200-240	200-240	200-240	230	230	120	120	120	120
Nominal Input Frequency	60Hz	60Hz	50Hz	50Hz	50Hz	50Hz	60Hz	60Hz	60Hz	60Hz
Input Frequency Tol (%)	±3	±3	±3	±3	±3	±3	±3	±3	±3	±3
Input Voltage Operating Range Tolerance (%)	-34 / +15	-30 / +20	-30 / +20	-30 / +20	-30 / +20	-30 / +20	-30 / +15	-30 / +15	-30 / +15	-30 / +15
Output Voltage (Vac)	63 / 89	63 / 89	63 / 89	63 / 89	63	63	63 / 89	63 / 89	63 / 89	63 / 89
Output Voltage Regulation	-5 / +1	-5 / +1	-5 / +1	-5 / +1	-6 / +1.5	-6 / +1.5	-5 / +1	-5 / +1	-5 / +1	-5 / +1
Maximum Rated Output Current	15 Amps	15 Amps	15 / 10 Amps	22 / 15 Amps	15 Amps	22 Amps	8 Amps	10 Amps	15 Amps	18 Amps
Output Power (VA)	1350	1350	900	1350	900	1408	720	900	1350	1620
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	10 Amps	10 Amps	10 Amps	10 Amps	10 Amps	10 Amps
Battery Voltage (Vdc)	36	36	36	36	36	36*	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)	60 / 27.2	60 / 27.2	53 / 24.1	67 / 30.5	53 / 24.1	67 / 30.5	48.5 / 22.0	49 / 22.3	60 / 27.2	60.5 / 27.5
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:	915M-HP	915P-HP	910E-HP	915E-HP	615CE-HP	622CE-HP	908HP	910HP	915HP	918HP
Name Plate Rating (Vac)	127	200-240	200-240	200-240	230	230	110-127	110-127	110-127	110-127
Input Window -/+ (% of Nominal Input)	-34 / +15	-30 / +20	-30 / +20	-30 / +20	-30 / +20	-30 / +20	-30 / +15	-30 / +15	-30 / +15	-30 / +15
Input Range (Vac)	84-146	161-276	161-276	161-276	161-276	161-276	84-138	84-138	84-138	84-138
Output Regulation -/+ (%)	-5 / +1	-5 / +1	-5 / +1	-5 / +1	-6 / +1.5	-6 / +1.5	-5 / +1	-5 / +1	-5 / +1	-5 / +1
Load Range	1-15A	1-15A	1-10A	1-15A	1-15A	1-22A	1-8A	1-10A	1-15A	1-18A
Output Voltage Min / Max (Vac)	84.6 / 90	84.6 / 90	84.6 / 90	84.6 / 90	59.2 / 64	59.2 / 64	84.6 / 90	84.6 / 90	84.6 / 90	84.6 / 90
<b>Safety Compliance</b>										
UL/CSA 60950-1, UL 1778, CSA 107.3 (NRTL/C)	Y	Y					Y	Y	Y	Y
IEC 60950-1 (CB)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
IEC 62040-1					Y	Y				
Safety Mark	NRTL/C	NRTL/C			CE	CE	NRTL/C	NRTL/C	NRTL/C	NRTL/C
<b>EMC Compliance</b>										
FCC Part 15 Class A	Y	Y					Y	Y	Y	Y
IEC/EN 50083-2 (CATV)					Y	Y				
IEC/EN 65040-2 (UPS)			Y	Y	Y	Y				
CISPR22			Y	Y	Y	Y				