

ALPHA'S NEXT-GENERATION UNINTERRUPTIBLE POWER SUPPLY





# **NEXT-GENERATION POWER**

From ground-breaking transformer design to the most intuitive and user-friendly interface in the industry, the XM3-HP sets the new standard in **intelligent power management**.



The **Alpha XM3-HP CableUPS** incorporates significant technological advancements across the entire power technology platform. These advancements focus on delivering three primary benefits: improved efficiency, optimized performance and reduced operating costs. The XM3-HP also incorporates a wide-range features including:

- **●** AlphaGuard<sup>™</sup>
  - 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 batteries and power train
- 4 Alpha DOC

  Dual Output Controller (DOC) provides two programmable outputs from a single XM3-HP

- **5** Alpha Smart-Display
  - Four-line display with intelligent, virtual keypad for optimal provisioning and diagnostics
- 6 Advanced Battery Management

  Dynamic 5-stage charger technology maximizes AlphaCell® battery life
- **AlphaNet**<sup>™</sup> **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 operations.





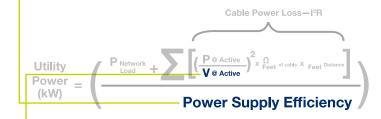


#### Exclusive Patent Protected Design

Moving the inverter winding to the output side of the ferro transformer minimizes conversion losses, improving overall inverter efficiency.

#### Highest Line Mode Efficiency

The XM3-HP offers the highest line mode efficiency available, requiring less AC utility power to support a load.



### Tightest Output Voltage Regulation

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

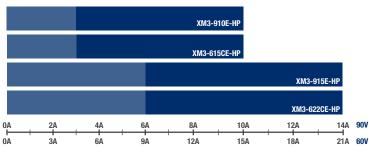
### Maximum Inverter Efficiency

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.





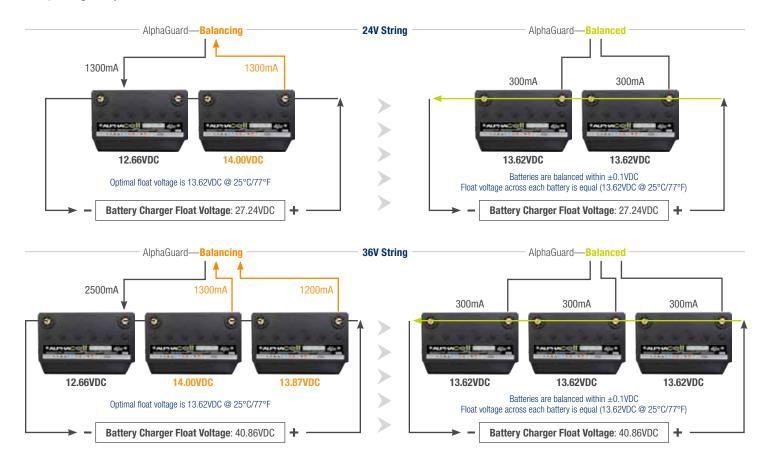


# **ADVANCED BATTERY MANAGEMENT**

The Alpha XM3-HP's advanced battery management optimizes battery life and contributes to reducing both capital expenditures and on-going operating costs.

#### Embedded Battery Balancing

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



#### Extended Runtime

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

### Dynamic Multi-Stage Charging

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

BULK | ACCEPT | FLOAT | REFRESH | REST





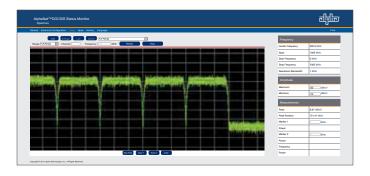
# **ADVANCED INTELLIGENCE PLATFORM**

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

#### ➤ Integrated DOCSIS® Communications

The XM3-HP can be used as a network test probe when equipped with an AlphaNet DM3.0 integrated management hub, integrated DOCSIS enables access to all of the XM3-HP's advanced information and diagnostics:

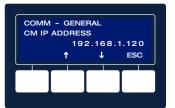
- Full Spectrum Capture
- Bonded Channel Micro Reflections
- Bonded Channel Constellations



**DOCSIS** Communications Menus







**IP Address** 

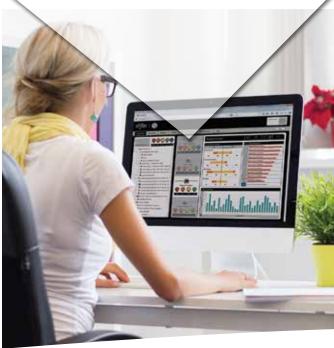


#### Integrated AlphaApps

Power reliability algorithms use real-time data to predict service intervals, battery replacements and offer real-time insights into the health of your HFC network via standard EMS interface. Parameters include:

- Battery Health
- Remaining Battery Runtime
- Trending Battery MHOs
- Utility Performance Reports
- Utility Meter







### XM3-HP CableUPS® European Specifications

Models:	906E-HP	906E-HP-24	910E-HP	915E-HP	608CE-HP	608CE-HP-24	615CE-HP	622CE-HP
Parameters								
Nominal AC Input Voltage:	200-240VAC	200-240VAC	200-240VAC	200-240VAC	230VAC	230VAC	230VAC	230VAC
Nominal Input Frequency:	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz
Input Frequency Tolerance:	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%
Input Voltage Operating Range Tolerance:	-30% / +20%	-30% / +20%	-30% / +20%	-30% / +20%	-25% / +20%	-25% / +20%	-25% / +20%	-25% / +20%
Output Voltage:	48 / 63 / 89VAC	48 / 63 / 89VAC	48 / 63 / 89VAC	63 / 89VAC	48 / 63VAC	48 / 63VAC	48 / 63VAC	63VAC
Output Voltage Regulation:	-5 / +1	-5 / +1	-5 / +1	-5 / +1	-3.5 / +1.5	-3.5 / +1.5	-3.5 / +1.5	-3.5 / +1.5
Maximum Rated Output Current:	8/8/6A	8/8/6A	15 / 15 / 10A	22 / 15A	8 / 8A	8 / 8A	15 / 15A	22A
Output Power:	534VA	534VA	900VA	1350VA	504VA	504VA	900VA	1408VA
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 (@ 80% Load & Nom Line):	6A	6A	10A	10A	6A	6A	10A	10A
Battery Voltage:  *XM2-622EE will continue as a 48V model until further notice.	36VDC	24VDC	36VDC	36VDC	36VDC	24VDC	36VDC	36VDC*

Mechanical								
Inverter Module:	Front plug in, hot-swappable inverter module							
Dimensions H x W x D (in/mm):	7.8 x 15 x 10 / 198.1 x 381 x 254, <b>With Handle</b> : 7.8 x 16.7 x 10.7 / 198.1 x 424.18 x 271.8							
Weight (lb/kg):	48.4 / 22.0	48.6 / 22.0	53 / 24.1	67 / 30.5	48.4 / 22.0	48.4 / 22.0	53 / 24.1	67 / 30.5
Input Power Connector:	IEC 320/C20							
Battery Connector:	Anderson style 75A							
Remote Temperature 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:	-40 to 60°C / -40 to 140°F (derate by 2°C / 3.6°F per 1,000 feet above 3,000 feet)
Storage Temperature:	-40 to 70°C / -40 to 158°F
Humidity:	≤ 95% non-condensing (relative)
Conformal Coating:	All printed circuit board assemblies to prevent moisture related failure

Safety Compliance									
EN 60728-11:					✓	✓	✓	✓	
IEC 60950-1 Ed 2 (CB):	✓	✓	✓	✓	✓	✓	✓	✓	
IEC 62040-1-2:					✓	✓	✓	✓	
Safety Mark:					CE	CE	CE	CE	
EMC Compliance									

EMC Compliance								
Category C3, Class B Conducted Limits:					✓	✓	✓	✓
EN 50083-2 (CATV):					✓	✓	✓	✓
EN 62040-2 (UPS):					✓	✓	✓	✓
CISPR Class A:	✓	✓	✓	✓				



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