DM3.0

**Specifications**

**Features**

- **Cable Modem**: XM3-HP series, XM2-HP series and XM2 series

**Supported Power**

- **Channel Bandwidth**: 8MHz, 6MHz
- **Data Rates**:
  - DOCSIS 3.0: 5 to 42MHz upstream, 88 to 1002MHz downstream

**Regulatory Compliance**

- **Alpha XM2 and XM3 broadband UPS specific. Inverter module**
- **Installation**:
  - IEEE 802.3at compliant, type 2, Power over Ethernet mid-span (Optional)

**Humidity**

10 to 90% non-condensing

**Storage Temperature**

-40 to 185°F / -40 to 85°C
-40 to 149°F / -40 to 65°C

**Weight**

10.7 / 304 (oz/g)

**Dimensions**

H x W x D

Power:

- Voltage disconnect protects batteries from over discharge
- 12W max, combined internal power connection and battery

**Ordering Information**

For XM3 Power Supplies

- X2-DM3X:
  - Alpha embedded DOCSIS 3.0 transponder with backhaul and Full Band Capture, XM2 installed, up to 4 battery strings, curbside generator & 5 power supplies
  - Alpha embedded EuroDOCSIS 3.0 transponder with backhaul and Full Band Capture, XM3 installed (NO embedded AlphaGuard), up to 4 battery strings, curbside generator & 5 power supplies
  - Portable Generators:_alpha embedded DOCSIS 3.0 transponder with backhaul and Full Band Capture, XM3 installed with embedded AlphaGuard

**Diagnostics**

- Event Logging:
  - With XM3 app card, logs include power supply events, power utility performance status including outages, network DHCP server, MAC address, DOCSIS timeout error codes

**Ordering Information**

- Fax: +1 360.671.4936
- Tel: +1 360.647.2360
- North America
- Fax: +49 9122.79889.21
- Tel: +49 9122.79889.0
- Europe
- Fax: +561 792.7157
- Tel: +561 792.9651
- Asia Pacific
- Fax: +852 2199.7988
- Tel: +852 2736.8663
- Asia Pacific
Alpha’s DM3.0 incorporates multiple advanced RF network test capabilities, including the latest spectrum capture tools, enabling operators to use the power supply physical presence as a 24x7 network test probe.

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

**Higher Power Intelligence**

Building on Alpha’s legacy of leadership and innovation, the DM3.0 integrated management hub raises the bar for outside plant power management. By combining advanced power supply, AC utility and RF network monitoring and diagnostics with network backhaul capabilities, the DM3.0 represents the next-generation in broadband network visibility. For more information, please visit [www.alphadm30.com](http://www.alphadm30.com).
Not just DOCSIS... Alpha DOCSIS

Alpha’s DM3.0 has been tested to operational extremes and doesn’t just endure harsh operating conditions, it works well through them. In addition to Cable Labs Certification, the DM3.0 has successfully completed over 1,500 hours of industry-standard physical, environmental, interoperability and performance testing. Our firmware undergoes hundreds of hours of intensive qualification testing, resulting in meeting and exceeding standards for power supply monitoring and gateway performance.

INTEGRATED POWER MANAGEMENT

Offering network operators a greater level of insight and convenience, Alpha’s DM3.0 provides advanced management and diagnostics of the power supply, batteries, generator and utility power grid including:

- AlphaGen Portable and Curbside Generator Monitoring
- Utility Grid and Battery Health Analysis
- XM3 Remote Firmware Updates

POWER SUPPLY MONITORING

Representing a significant advance in technology, Alpha’s DM3.0 is more than a DOCSIS 3.0 status monitoring transponder. It provides real-time insight into the health of your HFC network, including:

- Integrated XM3 and XM2 Power Supply Management
- Standard ANSI/SCTE Alarms and Data
- CheetahXD and Continuity Advanced Monitoring
### DM3.0 Specifications

#### Features

**Supported Power Supply Models:** XM3-HP series, XM2-HP series and XM2 series

**Models:**
- DM3 (DOCSIS) & DM3E (EuroDOCSIS): Compatible with XM3 power supplies
- DM3X (DOCSIS) & DM3XE (EuroDOCSIS): Compatible with XM2 and XM3 power supplies

**Cable Modem**

- **Frequency:**
  - DM3: 10.7 / 304 (oz/g)
- **Weight:** 10.7 / 304
- **Dimensions:**
  - H x W x D (in/mm): 5.6 x 1.1 x 7.4 / 143 x 28 x 188

**Physical and Environmental**

**Installation:**
- Alpha XM2 and XM3 broadband UPS specific, Inverter module co-installed via internal interface connectors

**Power:**
- XM3: 12W max, internal power connection
- XM2: 12W max, combined internal power connection and battery string connection (24, 36 or 48 battery strings), internal low voltage disconnect protects batteries from over discharge

**Battery Monitoring:**
- DM3: Individual battery voltages monitored via XM3 embedded AlphaGuard
- DM3X: Individual battery voltages monitored via direct sense harness. Up to 16 individual batteries configured in 1, 2, 3 or 4 strings of 36 or 48V batteries

**Power Systems:**
- DM3X: Up to 5 XM2 or XM3 power supplies and/or an AlphaGen curbsite generator. System management includes coordinated battery charging, system test and aggregated alarm

**Data Backhaul**
- Complies with DOCSIS 3.0 CPE interface operation

**Network Test Probe**
- With DM3.0 installed, power display will show advanced network diagnostics including: upstream and downstream frequencies and RF levels, IPv4 or IPv6 address assigned by network DHCP server, MAC address, DOCSIS timeout error codes and firmware versions

**Utilility Power Diagnostics:**
- With XM3 app card, utility performance status including outages, sags, surges, and out of frequency events

**Battery Diagnostics:**
- With XM3 app card, power supply diagnostics report when batteries should be serviced including battery string runtime remaining and battery life remaining

**Event Logging:**
- With XM3 app card, logs include power supply events, power supply configurations and battery events

### Advanced Diagnostics

**RF Network:**
- Full Band Capture data available through Broadcom MIB and DM3.0 internal web server
- Constellation diagram available via DM3.0 internal web server
- Micro-reflection diagram available via DM3.0 internal web server

**Power Supply Display:**
- With DM3.0 installed, powered, display will show advanced network diagnostics including: upstream and downstream frequencies and RF levels, IPv4 or IPv6 address assigned by network DHCP server, MAC address, DOCSIS timeout error codes and firmware versions

**Utility Power Diagnostics:**
- With XM3 app card, utility performance status including outages, sags, surges, and out of frequency events

### Status Monitoring

**Power Supply Monitored Parameters (ANSI-HMS):**

- Major alarm, minor alarm, input voltage, output voltage, output current, output power, input current, input power, UPS status, charger current, battery discharge current, battery voltage, battery temperature, remote test control, enclosure door

**Portable Generators:**
- Models: AlphaGen DCX2000, DCX3000

**Curbside Generators:**
- Models: AlphaGen 3.5, 5.0 and 7.5kW vs AlphaBus interface

**Ordering Information (For XM3 Power Supplies):**

- **X3-DM3:**
  - Alpha embedded DOCSIS 3.0 transponder with backhaul and Full Band Capture, XM2 installed with embedded AlphaGuard

- **X3-DM3E:**
  - Alpha embedded EuroDOCSIS 3.0 transponder with backhaul and Full Band Capture, XM3 installed with embedded AlphaGuard

- **X3-DM3X:**
  - Alpha embedded DOCSIS 3.0 transponder with backhaul and Full Band Capture, XM3 installed (NO embedded AlphaGuard), up to 4 battery strings, curbsite generator and 5 power supplies

- **X3-DM3EX:**
  - Alpha embedded EuroDOCSIS 3.0 transponder with backhaul and Full Band Capture, XM3 installed (NO embedded AlphaGuard), up to 4 battery strings, curbsite generator & 5 power supplies

**Ordering Information (For XM2 Power Supplies):**

- **X2-DM3X:**
  - Alpha embedded DOCSIS 3.0 transponder with backhaul and Full Band Capture, XM2 installed, up to 4 battery strings, curbsite generator & 5 power supplies

- **X2-DM3EX:**
  - Alpha embedded EuroDOCSIS 3.0 transponder with backhaul and Full Band Capture, XM2 installed, up to 4 battery strings, curbsite generator & 5 power supplies

### Worldwide Corporate Offices

<table>
<thead>
<tr>
<th>Region</th>
<th>Contact Information</th>
</tr>
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<tbody>
<tr>
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**Certifications:**

- **Conformance:**
  - FCC Part 15 Class A
  - EN 50082-2 EMC requirements for CATV equipment, corrected for category 6 cabling.
  - EN 62040-2 EMC requirements for uninterruptible power supplies
  - Surge: IEEE 802.41.6kV combined wave with external surge protector
  - RoHS: Directive 2002/95/EC

**Standards:**

- ANSI/SCTE 38-4: Hybrid fiber/coax outside plant status monitoring
- ANSI/SCTE 38-6: Hybrid fiber/coax outside plant status monitoring
- Cheetah proprietary KPI management information base
- Alpha proprietary, portable generator management information base
- AlphaGen DX2000, DX3000

**Monitor Parameters:**

- Generator connected, generator running, generator runtime

**Curbside Generators:**

- Models: AlphaGen 3.5, 5.0 and 7.5kW vs AlphaBus interface

**Ordering Information:**

- **XM3-DM3:**
  - Alpha embedded DOCSIS 3.0 transponder with backhaul and Full Band Capture, XM2 installed with embedded AlphaGuard

- **XM3-DM3E:**
  - Alpha embedded EuroDOCSIS 3.0 transponder with backhaul and Full Band Capture, XM3 installed with embedded AlphaGuard

- **XM3-DM3X:**
  - Alpha embedded DOCSIS 3.0 transponder with backhaul and Full Band Capture, XM3 installed (NO embedded AlphaGuard), up to 4 battery strings, curbsite generator and 5 power supplies

- **XM3-DM3EX:**
  - Alpha embedded EuroDOCSIS 3.0 transponder with backhaul and Full Band Capture, XM3 installed (NO embedded AlphaGuard), up to 4 battery strings, curbsite generator & 5 power supplies

- **XM2-DM3X:**
  - Alpha embedded DOCSIS 3.0 transponder with backhaul and Full Band Capture, XM2 installed, up to 4 battery strings, curbsite generator & 5 power supplies

- **XM2-DM3EX:**
  - Alpha embedded EuroDOCSIS 3.0 transponder with backhaul and Full Band Capture, XM2 installed, up to 4 battery strings, curbsite generator & 5 power supplies