DOCSIS® status monitoring options using internal or external transponders

SCTE HMS standards based status monitoring options

Vendor specific internal transponders minimize installation labor and complexity

Combine internal transponders with the AlphaGuard™ battery balancing system and a single battery wire harness supports both status monitoring and battery charge management

Alpha’s family of status monitoring solutions enables cable operators to manage their network power systems using a variety of standard and application specific tools. Whether monitoring a single power supply or multiple power supplies with multiple strings of batteries and a generator, Alpha has a solution to fit your application.
Power Supply Monitoring Options

<table>
<thead>
<tr>
<th>Model</th>
<th>DOCSIS®</th>
<th>HMS</th>
<th>CBT¹</th>
<th>AM²</th>
</tr>
</thead>
<tbody>
<tr>
<td>XM2</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>XM</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>ZTT+</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CPR</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Transponder product available from Alpha Technologies

Power supply interface supports 3rd party transponder connection

Status Monitoring Options

DOCSIS EMBEDDED XM2 TRANSPODER The XM2 Digital Embedded DOCSIS Transponder enables cable operators to manage their network powering through the existing cable modem infrastructure. Multiple power supplies, batteries and a generator can be monitored using a single transponder. Transponder data is transmitted to a management system over the network’s DOCSIS cable modem channels through the existing CMTS. Bandwidth utilization is minimized by using standard SNMP (Simple Network Management Protocol) communications. Status monitoring information is compatible with ANSI/SCTE HMS standards. Requires EDSM power supply interface option.

DOCSIS ANALOG TRANSPONDER Used to monitor power supplies with analog status monitoring interfaces. The Analog DOCSIS Transponder enables cable operators to manage their network powering through the existing cable modem infrastructure. Transponder data is transmitted to a management system over the network’s DOCSIS cable modem channels through the existing CMTS. Bandwidth utilization is minimized by using standard SNMP (Simple Network Management Protocol) communications. Status monitoring information is converted from analog inputs to approximate ANSI/SCTE HMS standards.

DOCSIS CPR TRANSPONDER The Lectro CPR DOCSIS Transponder enables cable operators to manage their network powering through the existing cable modem infrastructure. Transponder data is transmitted to a management system over the network’s DOCSIS cable modem channels through the existing CMTS. Bandwidth utilization is minimized by using standard SNMP (Simple Network Management Protocol) communications. Status monitoring information approximates ANSI/SCTE HMS standards.

HMS EMBEDDED XM2 TRANSPONDER The XM2 Digital Embedded HMS Transponder enables cable operators to manage their network powering using standard based Head End Controller (HEC) and Software interfaces defined by the SCTE HMS. Requires EDSM power supply interface option.

CHEETAH EMBEDDED XM2 TRANSPONDER The XM2 embedded Cheeta by Tollgrade transponder supports Cheeta style status monitoring. The embedded design simplifies installation wiring and reduces time per site when compared to external transponder products. Requires USM2.5 power supply interface option.

CHEETAH EMBEDDED CPR TRANSPONDER The Lectro CPR embedded Cheeta by Tollgrade transponder supports Cheeta style status monitoring. The embedded design simplifies installation wiring and reduces time per site when compared to external transponder products.

AM COMMUNICATIONS EMBEDDED XM2 TRANSPONDER The XM2 digital embedded AM Communications transponder supports status monitoring with AM COMMUNICATIONS monitoring equipment. The embedded design simplifies installation wiring and reduces time per site when compared to external transponder products. Requires EDSM power supply interface option.

XM2 DIGITAL INTERFACE (EDSM) This status monitoring option is installed in an XM2 power supply providing an interface to a digital transponder. Multiple digital transponder options exist, see transponder descriptions for more information. The EDSM interfaces to multiple power supplies (up to 6 total), multiple battery strings, a generator and provides status monitoring information from each of these devices to a single transponder. The EDSM also functions as a system controller when multiple power supplies are installed in a single location.

When combined with an AlphaGuard battery charge management system, only a single wire harness is required for both voltage monitoring and charge management.

XM2 ANALOG INTERFACE (USM2.5) This status monitoring option is installed in an XM2 power supply providing an interface to analog transponders. Select an embedded transponder to simplify installation wiring and improve reliability. Or, use the external connection and user configurable settings to connect to most legacy external transponder products.

XM2 EXPANSION INTERFACE (XM2-SI) Used to connect multiple XM2s into a centralized powernode system.

For contact information visit www.AGIPower.com

The Alpha Group

Europe, Middle East & Africa

Cyprus
Tel: +357 25 375 675
Fax: +357 25 359 595

Germany
Tel: +49 9122 79899 0
Fax: +49 9122 79899 21

United Kingdom
Tel: +44 1279 423355
Fax: +44 1279 422110

Russia
Tel: +7 095 925 9844
Fax: +7 095 916 7549

Asia Pacific

Australia
Tel: +61 2 9722 3320
Fax: +61 2 9722 3321

P.R. China
Tel: +852 2199 7988
Fax: +852 2119 7988

USA
Tel: +1 604 430 1476
Fax: +1 604 430 8908

USA
Tel: +1 604 430 1476
Fax: +1 604 430 8908

North America

Canada
Tel: +61 2 9722 3320
Fax: +61 2 9722 3321

USA
Tel: +1 852 2736 8663
Fax: +852 2736 8663

Latin & South America

Contact USA office

Alpha Technologies reserves the right to make changes to the products and information contained in this document without notice.

Copyright © 2004 Alpha Technologies. All Rights Reserved. Alpha® is a registered trademark of Alpha Technologies.

049-085-13-001 (10/04)