

Cheetah™ DOCSIS®-based Transponders (CMD Series)

Tollgrade's Cheetah DOCSIS-based transponders enable cable operators to proactively monitor devices in the outside plant using the existing DOCSIS infrastructure. Device and system data is sent via the DOCSIS channels from the transponder through the existing CMTS to software tools, such as Tollgrade's CheetahXD™. With the Cheetah DOCSIS-based solution, cable operators are able to manage their data to precisely pinpoint the location and cause of problems, often identifying degrading equipment before failure. Being able to proactively respond to these system performance issues minimizes plant downtime, lowers costs and increases customer satisfaction.

Tollgrade's DOCSIS-based transponders have been designed to monitor a wide range of equipment using an analog interface and/or the status monitoring standards developed by the SCTE-HMS subcommittee.

By using the existing DOCSIS infrastructure and frequencies, Cheetah DOCSIS-based transponders can be easily deployed within the cable network.

To aid servicing and installation, the transponders have local RS-232 craft ports, allowing a technician with a computer to locally query and perform on-site service.

As new features and applications become available, transponder firmware may be remotely downloaded without requiring a field visit or device change-out.

Features

Tollgrade's Cheetah DOCSIS-based transponder:

- Uses the existing DOCSIS infrastructure;
- Is compatible with ANSI/SCTE-HMS standards;
- Requires no dedicated frequencies;
- Supports downloadable firmware for new features and applications; and
- Provides early trouble detection to promote proactive maintenance and protect the investment of advanced services.

Tollgrade
is everywhere
your broadband
network needs
to be.™

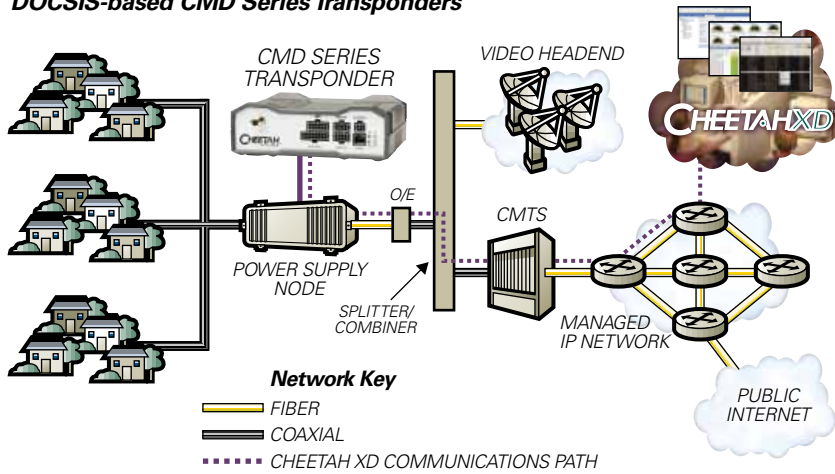
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Cheetah DOCSIS-based transponders provide unparalleled visibility into the HFC network and can be upgraded to be an advanced VoIP test point.



CMD-P model shown

Bi-directional HFC Network Using Tollgrade DOCSIS-based CMD Series Transponders



An Optimal End-to-end Design

From the full-featured CheetahXD Software to the DOCSIS-based, HMS Transponder MIB Extensions, Tollgrade provides a status monitoring solution designed to grow as your HFC status monitoring needs evolve.

Designed for environmental extremes within the outside plant, Cheetah CMD Series transponders use hardened versions of the same reliable DOCSIS-based technologies used in millions of modems.

Implementing network status monitoring has never been easier. All of the operational cost advantages and features of DOCSIS protocol are utilized by Cheetah DOCSIS-based transponders. When combined with the powerful analysis tools built into the CheetahXD Software, the CMD Series provides an effective early-detection system that allows an operator to be proactive with system maintenance, to help preserve the revenue of today's advanced services.

CMD Series Specifications

General

DOCSIS Version 1.1
 HMS Monitoring Protocol SNMP v1
 DOCSIS Monitoring Protocol SNMP v1, v2, v3
 RF Cable Interface F-connector, female, 75 ohm impedance
 Craft Interface RJ-12, RS-232, 19.2kb, N, 8, 1
 (Required: Adapter to connect to PC serial port, Hyperterminal or equivalent)
 Operating Temperature -40°C to +75°C
 Humidity 10% to 90% (non-condensing)
 EMI/EMC FCC Part 15 Class A, CE EN50022 Class A

RF Transmit/Receive

Tx Frequency Range 5 to 42 MHz
 Tx Output Power +8 to +58 dBmV
 Rx Frequency Range 91 to 857 MHz (Center frequency of: Standard, HRC, IRC)
 Rx Input Level -15 to +15 dBmV
 Channel Bandwidth 6 MHz

Management

NMS/EMS CheetahXD Software Standard SNMP management tools
 MIBs Supported ANSI/SCTE HMS (restricted by device monitored), DOCSIS 1.1

Parametric Measurements, Inputs/Outputs, Mechanical/Power

Detailed technical specification sheets are available for each target device that has been integrated. Please contact your Tollgrade representative for more information.

Ordering Information

Please contact your Tollgrade representative for ordering information.



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