



# Release Notes for Multimode Transponder Module Functional Image Release 1.A0

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**Date:** September 24, 2002

**Multimode Transponder Functional image name 1.A0**

**Text Part Number:** OL-3020-01 Rev. A0

This document describes the features and caveats for the functional image, release 1.A0, for the multimode transponder modules used with the Cisco ONS 15540 ESP and the Cisco ONS 15540 ESPx.

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## Introduction

The Cisco ONS 15540 ESP and Cisco ONS 15540 ESPx are optical transport platforms that employ DWDM (dense wavelength division multiplexing) technology. With the Cisco ONS 15540 ESP, users can take advantage of the availability of dark fiber to build a common infrastructure that supports data, SAN (storage area network) and TDM (time-division multiplexing) traffic. The multimode transponder module converts the client signal to an ITU wavelength. The client interface on a multimode transponder line card is protocol transparent and bit-rate transparent, and accepts multimode client signals on the 1310-nm wavelength through an SC connector.



# Determining the Functional Image Release Version

This section describes the process you use to determine the existing functional image release version installed on your single mode transponder module.

To display the functional image version in a single mode transponder module, use the following command in EXEC mode:

Command	Purpose
<b>show hardware linecard slot</b>	Displays the detailed hardware information including the functional image release version.

The version appears in the Functional Image Version field in the **show hardware linecard** command output.

## Example

The following example shows the functional image release version for a single mode transponder module:

```
Switch# show hardware linecard 2
-----
Slot Number           : 2/*
Controller Type       : 0x1019
On-Board Description  : TRANSPONDER_MOTHER_CN_TOWER
Orderable Product Number: 15540-LCMB-1100
Board Part Number    : 68-1672-02
Board Revision       : 03
Serial Number        : CAB0605MF0M
Manufacturing Date   : 01/13/2002
Hardware Version     : 2.0
RMA Number           : 0x00
RMA Failure Code     : 0x00
→ Functional Image Version: 2.72 (dec), 2.48 (hex)
Subcard Power Control : 0:ON, 1:ON, 2:ON, 3:ON
-----
Slot Number           : 2/0
Controller Type       : 0x1001
On-Board Description  : TRANSPONDER_Type_I_PHASE_0
Orderable Product Number: N/A
Board Part Number    : 68-1426-01
Board Revision       : 10
Serial Number        : CAB0520HQUP
Manufacturing Date   : 05/29/2002
Hardware Version     : 2.32
RMA Number           : 0x00
RMA Failure Code     : 0x00
→ Functional Image Version: 1.160 (dec), 1.A0 (hex)
Transceiver type     : Non-pluggable Transceiver
-----
<Information deleted>
```

For information on updating functional images, refer to the [Cisco ONS 15540 ESPx Software Upgrade Guide](#) or the [Cisco ONS 15540 ESP Software Upgrade Guide](#).

# Caveats

This section lists the caveats for the multimode transponder module functional image. Use [Table 1](#) to determine the status of a particular caveat. In the table, “C” means a corrected caveat, and “O” means an open caveat.

*Table 1 Multimode Transponder Module Functional Image Caveats*

DDTS Number	Release 1.A0
<a href="#">CSCdw43539</a>	C
<a href="#">CSCdx49319</a>	C

## Caveats Symptoms and Workarounds

This section describes the caveat symptoms and workarounds for this release of the multimode transponder module functional image.

- [CSCdw43539](#)

**Symptom:** After exposure to very high bit error rates, the Section B1 error counter might continue to increment when errors are no longer present.

Affected Release: 1.64

**Workaround:** Disable monitoring on the transparent interface using the **no monitor** command.

- [CSCdx49319](#)

**Symptom:** The SONET B1 counter in the performance monitor wraps around to zero when very high bit error rates occur, causing error statistics which are lower than the actual values.

Affected Release: 1.9F

**Workaround:** None.

## Related Documentation

Refer to the following documents for more information about the Cisco ONS 15540 ESP:

- [Cisco ONS 15540 ESP Planning and Design Guide](#)
- [Regulatory Compliance and Safety Information for the Cisco ONS 15540 ESP](#)
- [Cisco ONS 15540 ESP Hardware Installation Guide](#)
- [Cisco ONS 15540 ESP Configuration Guide and Command Reference](#)
- [Cisco ONS 15540 ESP Troubleshooting Guide](#)
- [Cisco ONS 15540 ESP MIB Quick Reference](#)
- [Glossary of Optical Networking Terms](#)

Refer to the following documents for more information about the Cisco ONS 15540 ESPx:

- [Cisco ONS 15540 ESPx Planning and Design Guide](#)
- [Regulatory Compliance and Safety Information for the Cisco ONS 15500 Series](#)
- [Cisco ONS 15540 ESPx Hardware Installation Guide](#)

- *Cisco ONS 15540 ESPx Configuration Guide and Command Reference*
- *Cisco ONS 15540 EXPx Alarms and Error Messages*
- *Cisco ONS 15540 ESPx MIB Quick Reference*
- *Glossary of Optical Networking Terms*

## Obtaining Documentation

These sections explain how to obtain documentation from Cisco Systems.

### World Wide Web

You can access the most current Cisco documentation on the World Wide Web at this URL:

<http://www.cisco.com>

Translated documentation is available at this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

### Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

### Ordering Documentation

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:  
[http://www.cisco.com/cgi-bin/order/order\\_root.pl](http://www.cisco.com/cgi-bin/order/order_root.pl)
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:  
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

### Documentation Feedback

You can submit comments electronically on Cisco.com. In the Cisco Documentation home page, click the **Fax** or **Email** option in the “Leave Feedback” section at the bottom of the page.

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Cisco Systems  
Attn: Document Resource Connection  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

### Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you with these tasks:

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

If you want to obtain customized information and service, you can self-register on Cisco.com. To access Cisco.com, go to this URL:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two levels of support are available: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Cisco TAC inquiries are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.

- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

The Cisco TAC resource that you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

## Cisco TAC Web Site

You can use the Cisco TAC Web Site to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to this URL:

<http://www.cisco.com/tac>

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

<http://www.cisco.com/register/>

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC Web Site, you can open a case online by using the TAC Case Open tool at this URL:

<http://www.cisco.com/tac/caseopen>

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC Web Site.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

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