



# Cisco CRS-1 8-Port 10-GE PLIM XENPAK Optics Module SMU Requirements

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## Contents

- [Introduction, page 2](#)
- [Description, page 2](#)
- [Common Issues, page 3](#)
- [Software Updates, page 4](#)
- [Related Documentation, page 4](#)

## Part Numbers

[Table 1](#) lists the Cisco product numbers to which this publication applies.

**Table 1** *PLIM and XENPAK Part Numbers*

Product Description	Cisco Part Number
Cisco CRS-1 8-Port 10-Gigabit Ethernet Interface Module	8-10GBE=
Cisco 10-GBASE Extended Range XENPAK Module for SMF	XENPAK-10GB-ER+=
Cisco 10-GBASE Long Range XENPAK Module for SMF	XENPAK-10GB-LR+=
Cisco 10-GBASE DWDM XENPAK Module (100-GHZ ITU grid)	DWDM-XENPAK-0.61= to DWDM-XENPAK-30.33= <sup>1</sup>

1. All DWDM XENPAK part numbers are listed in [Table 2](#).



**Americas Headquarters:**  
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

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# Introduction

For correct operation of newly released long-range, extended-range and DWDM XENPAKs on the Cisco CRS-1 8-port 10-Gigabit Ethernet physical layer interface module (PLIM) running Cisco IOS XR Software Releases earlier than 3.3.3 and 3.4.0, a Software Maintenance Update (SMU) may be required.

## Description

Because the CRS-1 8-port 10-GE PLIM supports multiple types of XENPAK modules, an SMU is required to use XENPAK modules in systems running software releases earlier than Cisco IOS XR Software Releases 3.3.3 and 3.4.0. The following XENPAK modules are affected and require an SMU for correct operation:

- All DWDM XENPAK modules ordered after February 16, 2007 (part numbers listed in [Table 2](#))
- All extended-range XENPAK modules ordered after January 28, 2007 (XENPAK-10GB-ER+, part number: 10-1888-04)
- All long-range XENPAK modules when LR+ becomes available (XENPAK-10GB-LR+, part number: 10-1838-04)

**Table 2** DWDM XENPAK Optics Modules

Part Number	Frequency (THz)	Center Wavelength (nm)
DWDM-XENPAK-30.33	195.9	1530.33
DWDM-XENPAK-31.12	195.8	1531.12
DWDM-XENPAK-31.90	195.7	1531.90
DWDM-XENPAK-32.68	195.6	1532.68
DWDM-XENPAK-34.25	195.4	1534.25
DWDM-XENPAK-35.04	195.3	1535.04
DWDM-XENPAK-35.82	195.2	1535.82
DWDM-XENPAK-36.61	195.1	1536.61
DWDM-XENPAK-38.19	194.9	1538.19
DWDM-XENPAK-38.98	194.8	1538.98
DWDM-XENPAK-39.77	194.7	1539.77
DWDM-XENPAK-40.56	194.6	1540.56
DWDM-XENPAK-42.14	194.4	1542.14
DWDM-XENPAK-42.94	194.3	1542.94
DWDM-XENPAK-43.73	194.2	1543.73
DWDM-XENPAK-44.53	194.1	1544.53
DWDM-XENPAK-46.12	193.9	1546.12
DWDM-XENPAK-46.92	193.8	1546.92
DWDM-XENPAK-47.72	193.7	1547.72
DWDM-XENPAK-48.51	193.6	1548.51

**Table 2 DWDM XENPAK Optics Modules (continued)**

Part Number	Frequency (THz)	Center Wavelength (nm)
DWDM-XENPAK-50.12	193.4	1550.12
DWDM-XENPAK-50.92	193.3	1550.92
DWDM-XENPAK-51.72	193.2	1551.72
DWDM-XENPAK-52.52	193.1	1552.52
DWDM-XENPAK-54.13	192.9	1554.13
DWDM-XENPAK-54.94	192.8	1554.94
DWDM-XENPAK-55.75	192.7	1555.75
DWDM-XENPAK-56.55	192.6	1556.55
DWDM-XENPAK-58.17	192.4	1558.17
DWDM-XENPAK-58.98	192.3	1558.98
DWDM-XENPAK-59.79	192.2	1559.79
DWDM-XENPAK-60.61	192.1	1560.61

## Common Issues

### What happens if the SMU is not applied?

If the correct SMU is not applied prior to insertion of the XENPAK module, the module does not pass diagnostics and correctly come online. Use the **show controller tengigabitethernet** command to display the status of the PLIM. If “*devid unknown*” is displayed following the Digital Optical Monitoring section output, there is a software incompatibility.

### Does the SMU support ISSU?

The SMU does not support In Service Software Upgrade (ISSU). The SMU will reset the CRS-1 8-port 10-GE PLIM, thereby causing some disruption to active traffic on the card.

### Do I need the SMU if I am using CRS-XENPAK-10GB-LR modules on the CRS-1 8-port 10-GE PLIM?

The SMU is not required for the CRS-XENPAK-10GB-LR XENPAK module.

### Do I need the SMU if I am using DWDM-XENPAK modules on the CRS-1 8-port 10-GE PLIM?

The SMU is not required for DWDM-XENPAK modules purchased prior to February 16, 2007.

### Do I need the SMU if I am running Cisco IOS XR Software Release 3.4.0

Cisco IOS XR Software Releases 3.3.3 and 3.4.0, and all later releases support the new-long range, extended-range and DWDM XENPAK modules. The SMU is only for systems running software releases earlier than Cisco IOS XR Software Releases 3.3.3 and 3.4.0.

# Software Updates

If necessary, update your software with one of the SMUs that are currently available to support the XENPAK modules on the Cisco CRS-1 8-port 10-GE PLIM, as listed in [Table 3](#). SMUs can be downloaded with your CCO login from the following location:

<http://www.cisco.com/cgi-bin/tablebuild.pl/iosxr-smu?>

**Table 3** SMUs to Support 10-GE PLIM XENPAK Modules

SMU ID	SMU Name
AA01578	<a href="#">hfr-lc-3.2.2.CSCsg08955</a>
AA01579	<a href="#">hfr-lc-3.2.3.CSCsg08955</a>
AA01580	<a href="#">hfr-lc-3.2.4.CSCsg08955</a>
AA01569	<a href="#">hfr-lc-3.2.6.CSCsg08955</a>
AA01581	<a href="#">hfr-lc-3.3.0.CSCsg08955</a>
AA01570	<a href="#">hfr-lc-3.3.1.CSCsg08955</a>
AA01657	<a href="#">hfr-lc-3.3.2.CSCsg08955</a>

## Related Documentation

Refer to the following documentation for more information on XENPAK modules in the 8-port 10-GE PLIM:

- *Cisco CRS-1 Carrier Routing System Gigabit Ethernet Physical Layer Interface Module Installation Note*

This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

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