

MUX DEMUX & OADM Quick Start Guide

Quick Start Guide V2.0



QSFPTEK Mux Demux & OADM Quick Start Guide

CWDM Mux Demux

DWDM Mux Demux

DWDM OADM

Introduction

The CWDM and DWDM Mux Demux device is designed by QSFPTEK. These products are available in FMU Plug-in Module and 1U Rack. Their line type includes single fiber and dual fiber, the CWDM Mux Demux channels include 8/9CH, the DWDM Mux Demux channels include 4/8/16/40 /64CH, the DWDM OADM channels include 8/16CH. Supports optional Monitor, Expansion and 1310nm Port.

We appreciate your decision to select QSFPTEK FMU&1U Mux Dmux & OADM. This manual is intended to help you become acquainted with the Mux Demux & OADM design and provide instructions for implementing the Mux Demux & OADM into your network.



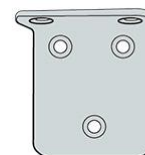
Accessories



Bracket Screws x4



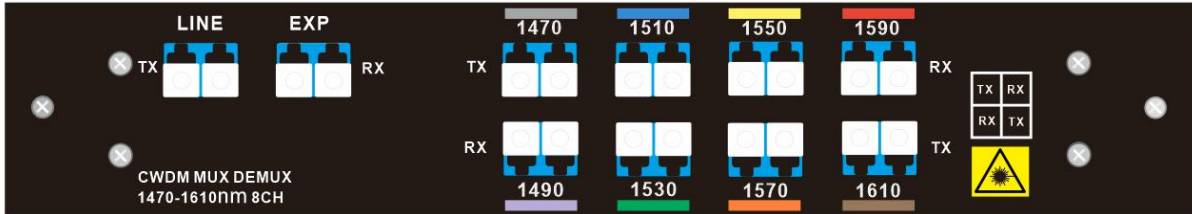
Bracket Nuts x4



(Only 1U Model)
Mounting Bracket x2

Functional Ports Overview

8CH CWDM Mux Demux, Dual Fiber, FMU



Port Wavelengths	
1470nm RX → TX Line	RX Line → 1470nm TX
1490nm RX → TX Line	RX Line → 1490nm TX
1510nm RX → TX Line	RX Line → 1510nm TX
1530nm RX → TX Line	RX Line → 1530nm TX
1550nm RX → TX Line	RX Line → 1550nm TX
1570nm RX → TX Line	RX Line → 1570nm TX
1590nm RX → TX Line	RX Line → 1590nm TX
1610nm RX → TX Line	RX Line → 1610nm TX
Functional Ports	
RX EXP → TX Line (The Mux that needs to be connected)	
RX Line (The Mux that needs to be connected) → TX EXP	
1310nm & Expansion Port for Capacity Enhancement	
The Monitor Port Extracts 1% of the Signal for Monitoring Channel Power Levels	

8CH CWDM Mux Demux, Dual Fiber, 1U



Port Wavelengths	
1470nm RX → TX Line	RX Line → 1470nm TX
1490nm RX → TX Line	RX Line → 1490nm TX
1510nm RX → TX Line	RX Line → 1510nm TX
1530nm RX → TX Line	RX Line → 1530nm TX
1550nm RX → TX Line	RX Line → 1550nm TX

1570nm RX → TX Line	RX Line → 1570nm TX
1590nm RX → TX Line	RX Line → 1590nm TX
1610nm RX → TX Line	RX Line → 1610nm TX
Functional Ports	
RX EXP → TX Line (The Mux that needs to be connected)	
RX Line (The Mux that needs to be connected) → TX EXP	
1310nm & Expansion Port for Capacity Enhancement	
The Monitor Port Extracts 1% of the Signal for Monitoring Channel Power Levels	

9CH CWDM Mux Demux, Single Fiber, 1U



Port Wavelengths	
Line → 1270nm TX	1290nm RX → Line
Line → 1310nm TX	1330nm RX → Line
Line → 1350nm TX	1370nm RX → Line
Line → 1390nm TX	1410nm RX → Line
Line → 1430nm TX	1450nm RX → Line
Line → 1470nm TX	1490nm RX → Line
Line → 1510nm TX	1530nm RX → Line
Line → 1550nm TX	1570nm RX → Line
Line → 1590nm TX	1610nm RX → Line
Functional Ports	
RX EXP → TX Line (The Mux that needs to be connected)	
RX Line (The Mux that needs to be connected) → TX EXP	
1310nm & Expansion Port for Capacity Enhancement	
The Monitor Port Extracts 1% of the Signal for Monitoring Channel Power Levels	

8CH DWDM OADM, East and West, Dual Fiber, 1U



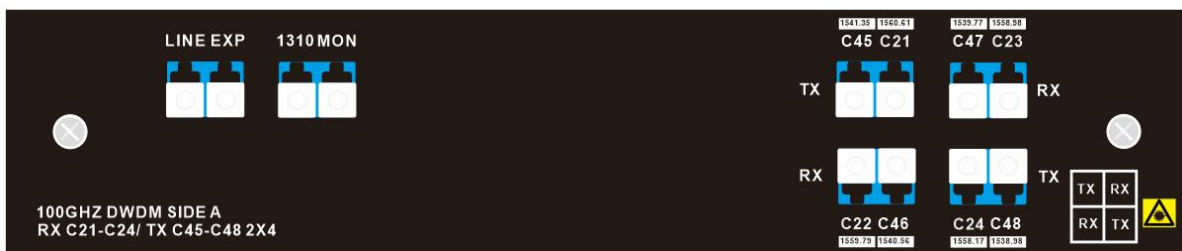
Port Wavelengths	
RX Line W → TX C29 W	RX Line E → TX C29 E
RX Line W → TX C30 W	RX Line E → TX C30 E
RX Line W → TX C31 W	RX Line E → TX C31 E
RX Line W → TX C32 W	RX Line E → TX C32 E
RX Line W → TX C33 W	RX Line E → TX C33 E
RX Line W → TX C34 W	RX Line E → TX C34 E
RX Line W → TX C35 W	RX Line E → TX C35 E
RX Line W → TX C36 W	RX Line E → TX C36 E
RX C29 W → TX Line W	RX C29 E → TX Line E
RX C30 W → TX Line W	RX C30 E → TX Line E
RX C31 W → TX Line W	RX C31 E → TX Line E
RX C32 W → TX Line W	RX C32 E → TX Line E
RX C33 W → TX Line W	RX C33 E → TX Line E
RX C34 W → TX Line W	RX C34 E → TX Line E
RX C35 W → TX Line W	RX C35 E → TX Line E
RX C36 W → TX Line W	RX C36 E → TX Line E
RX Line W → TX Line E (Other Than C29-C36)	
RX Line E → TX Line W (Other Than C29-C36)	
Functional Ports	
RX EXP → TX Line (The Mux that needs to be connected)	
RX Line (The Mux that needs to be connected) → TX EXP	
1310nm & Expansion Port for Capacity Enhancement	
The Monitor Port Extracts 1% of the Signal for Monitoring Channel Power Levels	
The TX of the Channel Port is drop, and RX is add	

8CH DWDM OADM, East or West, Dual Fiber, 1U



Port Wavelengths	
RX Line W → TX C29 W	RX C29 W → TX Line W
RX Line W → TX C30 W	RX C30 W → TX Line W
RX Line W → TX C31 W	RX C31 W → TX Line W
RX Line W → TX C32 W	RX C32 W → TX Line W
RX Line W → TX C33 W	RX C33 W → TX Line W
RX Line W → TX C34 W	RX C34 W → TX Line W
RX Line W → TX C35 W	RX C35 W → TX Line W
RX Line W → TX C36 W	RX C36 W → TX Line W
RX Line W → TX Line E (Other Than C29-C36)	
RX Line E → TX Line W (Other Than C29-C36)	
Functional Ports	
RX EXP → TX Line (The Mux that needs to be connected)	
RX Line (The Mux that needs to be connected) → TX EXP	
1310nm & Expansion Port for Capacity Enhancement	
The Monitor Port Extracts 1% of the Signal for Monitoring Channel Power Levels	
The TX of the Channel Port is drop, and RX is add	

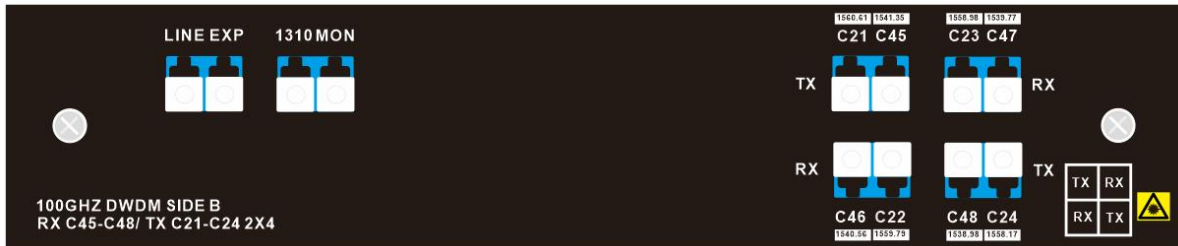
4CH DWDM Mux Demux, Side A, Single Fiber, FMU



Port Wavelengths	
C21 RX → TX Line	RX Line → C45 TX
C22 RX → TX Line	RX Line → C46 TX
C23 RX → TX Line	RX Line → C47 TX
C24 RX → TX Line	RX Line → C48 TX

Functional Ports
RX EXP → TX Line (The Mux that needs to be connected)
RX Line (The Mux that needs to be connected) → TX EXP
1310nm & Expansion Port for Capacity Enhancement
The Monitor Port Extracts 1% of the Signal for Monitoring Channel Power Levels

4CH DWDM Mux Demux, Side B, Single Fiber, FMU



Port Wavelengths	
C45 RX → TX Line	RX Line → C21 TX
C46 RX → TX Line	RX Line → C22 TX
C47 RX → TX Line	RX Line → C23 TX
C48 RX → TX Line	RX Line → C24 TX

Functional Ports
RX EXP → TX Line (The Mux that needs to be connected)
RX Line (The Mux that needs to be connected) → TX EXP
1310nm & Expansion Port for Capacity Enhancement
The Monitor Port Extracts 1% of the Signal for Monitoring Channel Power Levels

Installation Requirements

Tools Preparation

- Screwdriver
- Static-proof wristband
- Bolt

Safety Principles

Keep dustless and clean during or after the installation.

- Put the cover in a safe place.
- Put tools in the right place where they are not easily falling down.
- Put on relatively tight clothes, fasten the tie or scarf well and roll up the sleeve, avoiding stumbling the machine box.
- Put on protective glasses if the environment may cause damage to your eyes.
- Avoid incorrect operations that may cause damage to humans or devices.

Site Environment

- Make sure that the workshop is well-ventilated, the heat of electrical devices is well-discharged.
- Avoid damaging devices by following the electrostatic discharge prevention procedure.
- Mux Demux Hardware Installation Manual.
- Put the machine box in a place where cool air can blow off the heat inside the machine box.
- Make sure the machine box is sealed.

Installation

FMU Plug-in Module



Plug the FMU CWDM/DWDM Mux Demux into a FMU 2-Slot 1U Chassis

- Position the module to match the chassis shelf.
- Insert module into the shelf space carefully.
- Apply pressure to engage the M3 captive screws, then proceed to tighten them on both sides.



Mounting The Chassis in a Rack

- Install the mounting bracket on the right and left side.
- Install the chassis that inserted CWDM/DWDM Mux Demux into the rack carefully.
- Tighten them with M6x12mm screws and M6 nuts.

1U Rack Mount



- Install the mounting bracket on the right and left side.
- Install the CWDM/DWDM Mux Demux into the rack carefully.
- Tighten them with M6x12mm screws and M6 nuts.

Connecting Fiber Cable



Support and Other Resources

- Contact us <https://www.qsfptek.com/company/contact-us.html>
- Customer Success <https://www.qsfptek.com/resources/customer-success-stories>
- Email support@qsfptek.com

Product Warranty

The Mux Demux & OADM products are backed by a 3-year limited warranty supported by QSFPTEK.

For more details about applying qualifications, please live chat or email sales@qsfptek.com for support.



3 Year Warranty