

WaveShifter® 300



Key Features

- Double the fiber capacity of metro and access links
- No 1550 nm transmitter to purchase
- <3 dB insertion loss (end to end)
- Save time and money over new fiber
- Utilize fiber more efficiently
- Recover fiber for new services

Applications

- Use with WaveShifter WDM modules to install a two-fiber system on one fiber or a four-fiber system on two fibers

Compliance

- SONET OC-1, OC-3, OC-12, and OC-48
- CSA - C22.2 and UL 1950
- FCC Class B, part 15
- IEC 825 Parts 1 and 2
- FDA CFR Title 21, Parts 1040.10 and 1040.11
- NEBS 3 compliant

The JDSU WaveShifter 300 module conserves fiber by using 1310/1550 nm wavelength division multiplexing (WDM) to combine two signals onto one fiber. Any 1310 nm fiber transmission system can be used with the WaveShifter 300 products.

The WaveShifter 300 works with a passive WDM coupler and the WaveShifter WDM to "shift" the transmission 1310 nm signal to the 1550 nm fiber window, using WDM to combine the 1550 nm signal with the receive 1310 nm signal. The WaveShifter 300/622 works from 6 Mb/s (OC-3) to 622 Mb/s (OC-12) data rates.

The WaveShifter 300 can be installed in any 19-inch/23-inch telecommunication rack using the JDSU FiberShelf. The WaveShifter 300 module is widely accepted for use in metropolitan or access network links.

2

Configuration

(Bidirectional configuration shown; also works in a unidirectional configuration)



Specifications

Parameter

WaveShifter 300/622

Optical

Wavelength (Tx port)	1260 to 1580 nm
Range (Tx port)	-25 to -3 dBm
Fiber type (Tx port)	Single mode or 50 µm multimode
Wavelength (Rx port)	1290 to 1330 nm
Extinction ratio	8.2 dB
Fiber type (Rx port)	Single mode, 50 µm or 62.5 µm multimode
COM (port) output wavelength	1530 to 1565 nm
COM (port) output power level	-3 to 0 dBm
COM (port) output fiber type	Single mode
Insertion loss from COM to Rx port	<1.5 dB
Isolation from COM to Rx at 1550 nm	>40 dB
Spectral width	1.0 nm (-20 dB)
Connectors	SC/PC

Transmission

Rate	6 to 622 Mb/s
Format	NRZ

Management

Craft interface	TL-1 and menu mode
Craft port	DB-9 female connector, RS232
Alarms	One Form B relay, active closed
Displays	LED display

Physical

Mounting	Shelf, dual, or single configurations
Power	6 W maximum, -48 V DC nominal (-40 to -60 V DC)
Dimensions (W x H x D)	2.54 x 15.24 x 24.77 cm (1 x 6 x 9.75 inches)

Environmental

Operating temperature ¹	-40 to 65 °C (note ¹)
Storage temperature	-40 to 85 °C
Humidity	95% RH non-condensing

Note: This product should be deployed in accordance with your company's deployment directives.

1. In accordance with Telecordia GR-418-CORE.

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: 525.726.006 and 519.530.007 (WaveShifter 300/622, SC with FiberShelf®)

Product Code	Description
525.726.006	WaveShifter 300/622, SC
525.730.006	WaveShifter WDM, SC
525.725.006	1310/1550 ruggedized coupler

Accessories Code	Description
519.530.007	FiberShelf
520.209.315	48/110 V power adapter



Telcordia is a registered trademark of Telcordia Technologies Incorporated.

All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. JDSU reserves the right to change at any time without notice the design, specifications, function, fit or form of its products described herein, including withdrawal at any time of a product offered for sale herein. JDSU makes no representations that the products herein are free from any intellectual property claims of others. Please contact JDSU for more information. FiberShelf, WaveShifter, JDSU and the JDSU logo are trademarks of JDS Uniphase Corporation. Other trademarks are the property of their respective holders. ©2006 JDS Uniphase Corporation. All rights reserved. 10002794 Rev. 003 03/06 WAVESHIFTER300.DS.CMS.AE