

# Touch Screen Display VOA Switch Tray VSD

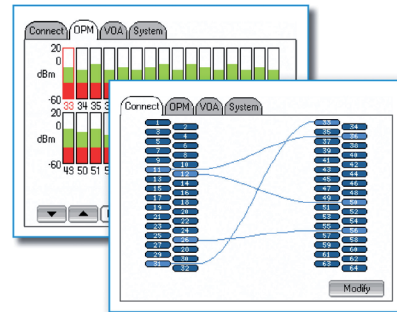
## VOA Touch Screen Display VSD

Polatis introduces the powerful new touch screen line of OPM/VOA Optical Switch Tray (VSD) products with built-in optical power monitoring and VOA capabilities.

The VSD product enables stand-alone front panel operation of all major switching functions, without the need for network connectivity or external devices. Operated through an intuitive page-driven graphical user interface, the front panel allows setting and viewing port connections, recalling stored switch connection patterns, setting the switch IP address, viewing port optical powers, and setting attenuation levels.

The VSD product provides remote and local operation, and is ideal for both network and test environments. In production and system test environments, the VSD delivers automated, high quality test capabilities. In networks, the VSD permits central office operators the ability to locally access fiber connections for service provisioning and restoration, and interrogate or attenuate optical power on individual links.

Like all Polatis products, the VSD offers the highest performance and reliability, with ultra-low insertion loss and



minimal optical impairments. The full range of Polatis' high performance single-mode optical switch matrices are available in the VSD platform.

## DirectLight® Technology

The VSD products are based on the patented DirectLight beam-steering technology, setting the benchmark for reliable, high performance optical switching.

## KEY FEATURES

- Touch screen control
- Easy to use GUI
- Remote or stand-alone control
- Optical power monitoring
- Optical attenuation (VOA) control
- Ultra-low insertion loss
- High repeatability
- USB, RS232, Ethernet, GPIB interface options
- Easy visual inspection of switch state
- Dark fiber switching
- Handles high optical power

## APPLICATIONS

- Production test automation
- Systems verification testing
- Interoperability testing
- Secure communications networks
- Centralized network monitoring
- PON/FTTx test and switching
- Service provisioning and restoration
- Pro-AV
- RF over fiber
- High power laser switching

# High performance optical switch solutions

## PERFORMANCE SPECIFICATIONS

FIBER COUNT DESIGNATOR	I		K	
	-100, -300, -400 Output Monitor or Absolute VOA	-200, -500 Input & Output Monitor or Relative VOA	-100, -300, -400 Output Monitor or Absolute VOA	-200, -500 Input & Output Monitor or Relative VOA
Insertion Loss @ 1550nm <sup>1</sup>	<1.2dB	<1.3dB	<1.6dB	<1.7dB
Polarization Dependent Loss @ 0 dB attenuation	<0.1dB	<0.1dB	<0.15dB	<0.15dB
Crosstalk	<-70dB		<-60dB	
Operating Wavelength Range <sup>5</sup>	1260-1625nm			
Wavelength Dependent Loss	<0.3dB (C+L Band)			
Repeatability <sup>6</sup>	<±0.05dB			
Return Loss <sup>2</sup>	>55dB			
Switching Time	<17ms			
Maximum Optical Power <sup>3</sup>	+24dBm			
Switch Lifetime	10 <sup>9</sup> cycles			
Operating Temp (Normal)	+10° to +40°C, <85% RH non-condensing			
Operating Temp (Extended)	-5° to +55°C, <85% RH non-condensing <sup>9</sup>			
Storage Temp (Normal) <sup>10</sup>	-30° to +70°C, <40% RH non-condensing <sup>9</sup>			
Storage Temp (Extended) <sup>10</sup>	-30° to +70°C, <40% RH non-condensing <sup>9</sup>			
Qualification (Normal)	Designed to meet EN60950			
Qualification (Extended)	Designed to meet Telcordia GR63 EN60950			
<b>VOA Performance</b>				
Optical Attenuation Range <sup>7</sup>	>40dB			
VOA Resolution	< 0.25dB			
Output Stability @ 0dB <sup>8</sup>	< ± 0.05dB			
<b>OPM Performance</b>				
Operating Wavelength Range <sup>5</sup>	1290-1330nm + 1450-1625nm			
OPM Dynamic Range <sup>4</sup>	-30 to +24dBm			
OPM Accuracy	< ± 0.5dBm			

All parameters are measured excluding connectors at 1550nm and 20°C with an unpolarized source after thermal equalization unless stated.

- Measured using a 3 patch-cord method as defined in TIA/EIA-526-14A.
- With APC connectors return loss >70dB without connectors.
- Switch will operate on dark fiber.
- Dynamic range for extended temperature is -20 to +24dBm.
- Calibrated range for optical power monitors; switch operable over 1260-1625nm.
- At zero attenuation.
- When output power is within OPM dynamic range.
- For stability at various levels of attenuation please contact Polatis for further details.
- Maximum absolute humidity equivalent to 85% at 40C.
- Long term storage within +10C to +35C, <40% RH to preserve display performance.
- Partially populated VOA & OPM options also available. Call for details.

The performance characteristics of the switch trays vary according to the fiber count.

Fiber Count	04	08	12	16	20	24	28	32	CC
04	I	I	I	I	K	K	K	K	-
08	I	I	I	I	K	K	K	K	K
12	I	I	I	I	K	K	K	K	K
16	I	I	I	I	K	K	K	K	K
20	K	K	K	K	K	K	K	K	K
24	K	K	K	K	K	K	K	K	K
28	K	K	K	K	K	K	K	K	K
32	K	K	K	K	K	K	K	K	K

## Packaging Information

Fiber Count	Tray Dimensions	Power Dissipation
4-32	19" rack mount, 3 rack units high	25 W
33-64		45 W

## Ordering Information

The part numbering scheme for Polatis products is as follows:

VSD - x - 1 - - - - -

Fibers	4-32 Input 8-32 Reconfigurable
Fibers	4-32 Output CC = Reconfigurable
Connector	L = LC F = FC C = SC T = ST U = MU
Polish	U = UPC A = APC
Fiber	1 = Single mode 9/125µm
Interface	E = Ethernet, RS232 & USB M = Ethernet (Multisession), RS232 & USB G = GPIB, Ethernet, RS232 & USB
Protocol	S = SCPI T = TL1 N = SNMP
Power	B = Battery (dual -48V) Mains connector type A = North America/Japan E = Continental Europe U = UK C = China/Australia
Environmental	N = Normal E = Extended
Customization	S = Standard Y = Non-standard variant
Switch Configuration*	-100 = Output power monitors with absolute VOA -200 = Input & output power monitors with relative VOA -300 = Output power monitors -400 = Input power monitors -500 = Input & output power monitors

\* Reconfigurable only have options 100, 300 & 400.

## FOR MORE INFORMATION

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