

# Vixel® 5100 V-GLM

## For Reliable High-Speed Performance in All Fibre Channel Configurations

Whether your applications demand high I/O operations per second or pure throughput, the new Vixel 5100 Gigabaud Link Module (GLM) assures superior optical performance and greater reliability. And it is fully interoperable across all components used in Fibre Channel applications.

The Vixel 5100 uses an advanced Vertical Cavity Surface Emitting Laser (VCSEL). The short wavelength GLM operates at a full speed of 1.0625 Gigabaud for Fibre Channel applications. The Vixel 5100 supports continuous, full-duplex communications over multi-mode fiber in a wide range of interconnects.

Vixel manufactures and tests products in key areas of the Fibre Channel SAN interconnect marketplace ensuring compatibility of the Vixel 5100 V-GLM with the broadest possible range of hosts. It is an outstanding performer.

With the industry trend toward an all optical, Non-Open Fibre Control solution for Fibre Channel Arbitrated Loop (FC-AL), the Vixel 5100 makes the best choice for migrating host systems to Fibre Channel. It's fast, reliable and cost-effective.



- > Greater reliability and performance from proven Vertical Cavity Laser technology
- > More flexible configurations with greater interoperability and interchangeability
- > Simplified interconnect interface for full-speed Fibre Channel applications
- > More reliable design and improved laser safety using Non-Open Fibre Control protocol
- > Complete compliance with Fibre Channel GLM specifications (FCSI – 301-Rev 1.0) and ANSI T11 standards for FC-PH-2

# VIXEL

MAKING THE FIBRE CHANNEL CONNECTION

## STANDARDS

Fibre Channel Gigabit Link Module (GLM) Specifications:

FCSI-301 Revision 1.0 GLM-S5C2  
Fibre Channel ANSI T11 FC-PH-2

## ARCHITECTURE

Data Rate:	1.0625 Gbps, 8B/10B coding
Wavelength:	770–860 nm, Non-OFC
Cable Type:	50/125 µm or; 62.5/125 µm multimode fiber
Connector Type:	Dual SC connector
Distance:	500 meters, 50/125 µm fiber; 300 meters, 62.5/125 µm fiber

## ENVIRONMENTAL CONDITIONS

Operating Voltage:	±5.0 Volts
Voltage Tolerance:	±5%
Current Icc (typ):	750 mA
Current Icc (max):	825 mA
Operating Temp.:	0–50 °C
Storage Temp.:	-40–85 °C

## TRANSMITTER CHANNEL

Spectral Width:	<4 nm RMS
RIN <sub>12</sub> (max):	<-116 dB/Hz
Tx Power (max):	-4 dBm, avg*
Tx Power (min):	-10 dBm, avg*
Extinction Ratio:	9 dB
Rise/Fall Time (max):	600 psec
Deterministic Jitter:	<20% p-p
Eye Opening:	>57%

## RECEIVER CHANNEL

Rx Saturation:	0 dBm
Rx Sensitivity at BER=10 <sup>-12</sup> :	-16 dBm
Rise/Fall Time (max):	600 psec
Return Loss:	12 dB

## Tx INPUT INTERFACE

TTL:	20 bits parallel
------	------------------

## Rx OUTPUT INTERFACE

TTL:	20 bits parallel
------	------------------

## AGENCY APPROVALS

United States and Canada:	UL, CSA, FCC, CDRH
Europe:	TUV PS, CE Mark

\*50/125 µm, 62.5/125 µm fiber, or open bore

## Vixel's Complete Fibre Channel Product Portfolio

Software	Switches	Hubs	Transceivers
SAN InSite	7100 Switch	1000 Hub	OE1063SW – Optical Shortwave GBIC
	7200 Switch	2000 Managed Hub	5100 V-GLM
	8100 Fabric Switch	2006 Managed Hub	
		2100 Zoning Managed Hub	



11911 North Creek Parkway South / Bothell / WA 98011  
Phone 425-806-5509 / Fax 425-806-4050  
www.vixel.com