



Gigabit Ethernet /
Fiber Channel Applications
3.3 to 5V, 1310nm, 1x9 – 1.25 / 1.0625 GBaud,
Power Budget 11 dBm

Key Features & Benefits

- Industry Standard 1x9 Footprint
- Link Distance Up to 10Km with 9/125um SMF
- 1310nm Fabry-Perot Laser
- PECL Differential Data Inputs and Outputs
- TTL Signal Detect
- Compliant with IEEE 802.3z GbE Specification
- 3.3 to 5V Power Supply
- Class 1 Laser Product
- AC/AC TTL Interface
- RoHS Compliance

Applications

- Switch to Switch Interface
- Mass Storage Systems
- Gigabit Ethernet
- Point to Point Link

Ordering Information

QDX-19-4-2M-T-x

QDX Family (all options):

QDX - 19 - 4 - xx - T - x

Code	Light Source	Mode	Symbol	Power Budget
1	850nm VCSEL	MM	SX	9dBm
1M	1310nm FP	MM	MLX	11dBm
2M	1310nm FP	SM	LX	11dBm
2L	1310nm DFB	SM	LHX	20dBm
3	1550nm DFB	SM	XD	18dBm
3L	1550nm DFB	SM	ZD	23dBm

Code	Housing Clip
N	None
F	Forward
Blank	Backward

Stratos

QDX-19-4-2M-T-x Optical Transceiver

Connectivity for
Business-Critical Continuity™

Transmitters

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Transmit Power ¹	P _O	-9		-3	dBm
Extinction Ratio (P1/P0)	ER	9			dB
Center Wavelength	λ_c	1280	1310	1355	nm
Spectral Width (RMS)	$\Delta\lambda$			4	nm
Optical Rise Time ²	t _R			260	ps
Optical Fall Time ²	t _F			260	ps
Relative Intensity Noise	RIN			-120	dB/Hz
Total Jitter	T _j			227	ps
Eye Diagram	Compliant with IEEE 802.3z				
Power Supply Current			100	140	mA

1. Output power is power coupled into a 9/125 um single mode fiber

2. Without filter 20% - 80% Values

Receivers

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Input Power – Maximum ¹	P _{IN}	-3			dBm
Optical Input Power – Minimum (Sensitivity) ¹	P _{IN}			-20	dBm
Operating Center Wavelength	λ_c	1260		1610	nm
Optical Return Loss	ORL	12			dB
Receiver Electrical 3dB Upper Cutoff Frequency				1500	MHz
Signal Detect – Asserted	P _A			-20	dBm
Signal Detect – Deasserted	P _D	-32			dBm
Signal Detect – Hysteresis	P _A -P _D	1		6	dB
Power Supply Current	I _{CC}		120	140	mA
Signal Detect Voltage – Low	V _{OL}			0.8	V
Signal Detect Voltage – High	V _{OH}	2			V

1. BER < 10⁻¹²

For more information on this product consult the QDX-19-4-2M-T-x product data sheet.

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