



Gigabit Ethernet / 1x Fiber Channel Applications 3.3V, 850nm VCSEL, Multimode, Up to 550Meters

Applications

The PxK-ST11x multimode optical fiber transceivers provide low profile, cost effective solutions for Gigabit Ethernet and 1x Fiber Channel multimode optical fiber data links with a duplex LC connector interface. These transceivers are fully compliant with the IEEE Gigabit Ethernet and 1x Fiber Channel standards but can be used for any other data communications purpose within their operating parameters.

Key Features & Benefits

- Low Profile Design - 0.386 inches max. height
- Surface mount I/O pins for high speed signal integrity
- Pluggable Transceiver for SMT Assembly Process
- Industrial Temp Range, Vibration tolerant design
- RX data squelch on Signal Detect deassert
- Individual (separate) +3.3 V power supply per port
- Industry standard duplex multimode LC receptacle
- Full compliance to IEEE and ANSI requirements
- EN-60825 / IEC-825 / CDRH Class 1 Compliant
- Optional Parylene C Conformal Coating

Ordering Information

Low Rider P X K - ST11 X

Shell Options

N= No GND Tabs (Flat Shell)
T= GND Tabs

Temperature and coating

H= -40 to 85 C, No Coating
M= -40 to 85 C, Conformal Coating

Transmitters: VCCTX = 3.135V to 3.465V, T_A = Operating Temperature Range

| Parameter | Symbol | MIN | Typical | MAX | Unit |
|-----------------------------------|----------------|------|---------|------|------|
| Optical Output Power ¹ | | | | | |
| LxK-ST11xx | P _O | -9.5 | | -4 | dBm |
| LxK2-ST11xx (+2dB Margin) | | -8.0 | | -1.5 | |
| LxK3-ST11xx (+3dB Margin) | | -7.0 | | -1.5 | |
| LxK5-ST11xx (+5dB Margin) | | -5.0 | | -1.5 | |
| Extinction Ratio | ER | | 10 | | dB |
| Coupled Power Ratio | CPR | 9 | | | dB |
| Total Jitter ¹ | | | 80 | 153 | pS |

Receivers: VCCRX = 3.135V to 3.465V, T_A = Operating Temperature Range

| Parameter | Symbol | MIN | Typical | MAX | Unit |
|--------------------------------------|----------------|-----|---------|-----|------|
| Optical Sensitivity ¹ | | | | | |
| Date Code 0105 and later (Jan 2005) | P _I | -21 | | 0 | dBm |
| Date Code 5204 and before (Dec 2004) | | -17 | | 0 | |
| Optical Return Loss | ORL | 12 | | | dB |

1. BER=10⁻¹² @ 1.25Gbps, PRBS 2⁷-1, NRZ, Compliant with ANSI X3.297 / FC-PH-2

Stratos

PxK-ST1 1x Low Profile Optical Transceiver

Connectivity for
Business-Critical Continuity™

Link Distances

| Application | Fiber Specification | Distance |
|--------------------------------|------------------------|----------|
| Gigabit Ethernet – IEEE 802.3z | 62.5/125 – 160MHz* Km | 220M |
| | 62.5/125 – 200MHz* Km | 275M |
| | 50/125 – 400MHz* Km | 500M |
| | 50/125 – 500MHz* Km | 550M |
| Fiber Channel – ANSI X3.297 | 62.5 /125 – 160MHz* Km | 300M |
| | 50/125 – 500MHz* Km | 500M |

For more information on this product consult the PxK-ST1 1x product data sheet.

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