Stratos
LxKx-ST11xx Low Profile Optical Transceiver
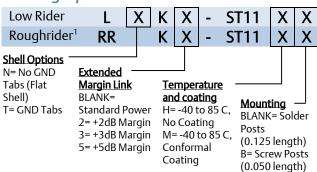
Gigabit Ethernet / 1x Fiber Channel Applications
3.3V, 850nm VCSEL, Multimode, Up to 550Meters

Applications

The LxKx-ST11xx 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.

Ordering Information

Low Rider	L	X	K	X	- ST11	X	X
Roughrider[1]	RR		K	X	- ST11	X	X

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

Extended Margin Link
BLANK= Standard Power
2= +2dB Margin
3= +3dB Margin
5= +5dB Margin

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

Mounting
BLANK= Solder Posts (0.125 length)
B= Screw Posts (0.050 length)

1. See product data sheet for information on Roughrider products.

Key Features & Benefits

- Low Profile Design - 0.386 inches max. height
- Surface mount I/O pins for high speed signal integrity
- All metal body, solder or screw mount options
- 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
- High Power options available
- Optional addition of fiber pigtail

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

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Output Power[1]	P_O				dBm
LxK-ST11xx		-9.5		-4	
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]	P_I				dBm
Date Code 0105 and later (Jan 2005)		-21		0	
Date Code 5204 and before (Dec 2004)		-17		0	
Optical Return Loss	ORL	12			dB

1. BER=10^{-12} @ 1.25Gbps, PRBS 2^7-1, NRZ, Compliant with ANSI X3.297 / FC-PH-2

Stratos
Connectivity Solutions

EMERSON™
Network Power

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 LxKx-ST11xx product data sheet.