

SenseLive

X8550

Industrial Fiber

Optical Transceiver

Industrial Fiber Optical Transceiver

Product Overview

The X8550 is an optical transceiver that converts 10/100M Ethernet electrical signals into optical signals and vice versa. By enabling Ethernet transmission over single-mode fiber, it extends communication distance from a few kilometers up to hundreds of kilometers, while maintaining high-bandwidth performance beyond the limits of traditional cables.

Key Features

- Dual Ports – 1× RJ45 Ethernet + 1× SC Fiber port
- Standards – IEEE 802.3 10/100Base-TX, 100Base-FX compliant
- Auto-Adapt – 10/100M speed & straight/cross cable detection
- Duplex Modes – Supports full and half duplex operation
- Flow Control – IEEE802.3X full-duplex & half-duplex back pressure
- Reliable Performance – Broadcast suppression, CRC error check
- Transmission Range – Twisted pair up to 100m, fiber up to 20km



Technical Specifications

Parameter	X8550
Interface:	Fiber Interface: Optical SC pluggable interface
Power Supply:	5.5mm, Inside positive outside negative, standard outlet/terminal
Size:	L x W x H =9.4cm×6.5cm×2.5cm
Communicate Interface	
Ethernet:	10M/100M, 2KV surge protection
Optical Fiber (9163):	Single-mode Single-fiber, double transferring

Optical Fiber Parameters			
Sub-Model:	Emission (TX) Wavelength		Receiving (RX) Wavelength
X8550-3 (A-end)	1310nm		1550nm
X8550-5 (B-end)	1550nm		1310nm
Optical Fiber Transmission Distance:	20Km	Optical Communication Interface:	SC
Power			
Power:	9 ~ 24V DC , 165mA@9V		
Environment			
Running temperature:	-40~85°C		
Storage temp:	-45~165°C		
Humidity:	5~95%RH		

Interface and Board instuction

Item	Name	Function
1	SC Fiber Interface	Fiber Interface
2	Fiber Link	Optical port link/status indicator; light on that has fiber access; light off that no fiber access.
3	Ethernet Link	Network status indicator; light on that there is a connected network; light off that no connection.
4	Power	Power indicator
5	RJ45	Ethernet Port
6	DC Plug	Power interface; Outer diameter 5.5mm, inner diameter 2.1mm
7	DC Terminal	Power Interface: 5.08mm terminal