Digital Telephone Fiber Optic Transceiver

Technical Datasheet

1. Product Overview

This plug-and-play multi-channel telephone optical transceiver delivers high-fidelity, anti-interference voice communication. Featuring real-time status indicators and isolated channels, it ensures stable transmission with support for fax and caller ID, all without requiring complex configuration.

2. Key Features

- Clear and stable communication with independent voice modules; channels do not interfere with each other.
- Plug-and-play operation, no configuration, tuning, or casing disassembly required.
- Real-time status indicator lights on the panel (P: Power Indicator, F: Fiber Link Indicator, T: Telephone Channel Indicator).
- External RJ11 telephone interface (connects telephone lines via modular plugs).
- Supports fax transmission, caller ID functionality, and high-fidelity optical communication.

3. Operating Principle

The device converts the analog signal of the telephone into an optical signal, which is then transmitted over long distances via fiber optic cables, achieving anti-interference, long-distance, and high-fidelity voice communication.

4. Technical Specifications

Category	Parameter	Specification
Power	Power Supply	DC 5V / customizable
	Voice Bandwidth	8KHz

Transmission / Voice Specs	Codec Method	PCM codec, 256 kb/s per channel
Optical & Network / Transmission Medium	Fiber Type	Single-Mode Single-Fiber
	Fiber Connector	FC/SC/ST optional
	Distance	20 km / 40 km / 60 km / 80 km/ 100 km / 120 km optional
	Interface	RJ11 Telephone Port
	Network Interface	RJ45
	Network Speed	100M/1000M
Interface / Application	Supported Terminals	Standard telephone, key telephone system (KTS), or PBX
	Connection Mode	Point-to-point telephone, telephone hotline, and phone-to-exchange mode
Mechanical & Environment	Operating Temp	-20 °C to +70 °C
	Actual Product Photo	Refer to Figure 1

Figure 1



Disclaimer: All specifications, designs, and information contained herein are subject to change without prior notice. Please refer to the actual product for final delivery.