

OFNR optical cable used in GPON



Article Overview

OFNR cables are non-conductive, riser-rated fiber optic cables commonly used in GPON deployments for vertical building runs, providing fire safety and reliable optical transmission.

What is OFNR?

OFNR (Optical Fiber Nonconductive Riser) is a type of fiber optic cable designed for interior riser applications, meaning it can safely run vertically between floors in a building . Key characteristics include:

- Non-conductive: Contains no metal components, reducing the risk of electrical hazards .
- Riser-rated: Complies with fire safety standards (ANSI/UL 1666) to prevent fire from spreading between floors .
- Durable outer jacket: Resistant to oxidation, degradation, and mechanical stress during installation .
- Not suitable for plenum areas: For spaces used for air circulation, OFNP or LSZH cables are required .

Role of OFNR in GPON

In a GPON (Gigabit Passive Optical Network), fiber cables connect the Optical Line Terminal (OLT) to splitters and then to Optical Network Terminals (ONTs) at the end-user premises . OFNR cables are ideal for:...

Article Content

May 22, 2026

Gigabyte Passive Optical Network (GPON)

GPON Network Architecture OLT – Optical Line Terminal sends and receives data at the service provider's central office. ODN –

Jun 20, 2026

A Comprehensive Guide to GPON and EPON Technologies in PON

In the following sections, we delve into the specifics of GPON and EPON to provide a detailed comparison. 2. What is

Mar 15, 2026

GPON Explained: What Is Gigabit Passive Optical Network?

What is GPON? GPON stands for Gigabit Passive Optical Network, a widely used fiber-access technology under the

Aug 03, 2025

3 Fiber Optic Cable Fire Rating – OFNP, OFNR And OFN

The fire rating of fiber optic cable can be specified into 3 types, OFNP, OFNR and OFN. And there is also LSZH which

Feb 04, 2026

Gigabit Passive Optical Networks (GPON) Fundamentals

GPON is abbreviation for Gigabit Passive Optical Networks which is defined series G.984.1 through G.984.6 by ITU-T

May 04, 2026

PASSIVE OPTICAL NETWORK COMPONENTS FOR GPON & FTTX

Teletronik develops wide range of reliable fiber optical cables, terminal boxes, splice closures, clamps, preformed wire guy-grips and

Oct 07, 2025

Understand GPON Technology

Optical Network Termination (ONT) /Optical Network Units (ONU) - Connects end-user devices (desktop, phones, and so on) into the

Mar 11, 2026

Passive optical network

In this use, a PON has a point-to-multipoint topology in which an ISP uses a single device to serve many

Jan 27, 2026

GPON Technology: How Does the Fiber Optic FTTH Network Work?

They provide conversion from optical to electrical signal. The ONT's also provide AES encryption through the ONT

Nov 24, 2025

What is GPON and How Does it Work?

GPON (Gigabit Passive Optical Network) is a next-generation PON standard used to deliver broadband access to homes and

Oct 21, 2025

Fiber Optic Cable Jacket Guide: OFNP vs OFNR, LSZH, PVC, PE,

Compare fiber optic cable jacket materials and fire ratings: OFNP vs OFNR, LSZH, PVC, PE, TPU. Selection guide for

Jun 03, 2026

A Guide to Cable for GPON Fiber Optic Systems

If you are constructing, maintaining, or supporting a gigabit passive optical network (GPON) fiber optic system for a

Aug 03, 2025

GPON SFP Module Wiki: GPON ONT SFP, GPON ONU SFP

GPON SFP is one type of gigabit optical transceivers that are used in GPON system, which is compliant with ITU-T

Nov 11, 2025

GPON: What Is It & How Does It Work? Here's All You Need To Know

This means that GPON connections can reach speeds up to 2.488 Gigabits per second on the downstream (from the provider to the

Apr 05, 2026

Optical fiber, nonconductive, riser

Optical fiber, nonconductive, riser (OFNR) is a type of optical fiber cable. As designated by the National Fire Protection Association

Jan 07, 2026

Passive optical network

Passive optical network A fiber optic cable assembly with SC APC connectors, as commonly used to link

Dec 05, 2025

What is GPON? Complete Guide to Gigabit Fiber Networks

Learn GPON technology basics, how it works, advantages vs EPON, and future PON trends. Complete guide to

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://greatpremiersolutions.co.za>

Email: sales@greatpremiersolutions.co.za

Phone: +27 82 914 3675

Address: Unit 5, Silicon Heights, 22 Electron Avenue, Cape Town, 8001, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

