

Special Cable and Optical Cable Specifications and Models



AI Overview

Special and optical cables are engineered for high-performance, industrial, and mission-critical applications, with specifications tailored to environmental, mechanical, and electrical requirements.

Special Electric Cables

Special electric cables are designed for industrial automation, railways, marine, military, and oil & gas sectors, where standard cables cannot meet operational demands . Key specifications include:

- Voltage Rating: Low to high voltage depending on application.
- Copper Size and Conductivity: Selected based on current-carrying requirements and signal integrity.
- Capacitance and Insulation: Critical for low-frequency analog signals and high-speed digital communication.
- Environmental Resistance: Cables are rated for UV, chemical, flame, abrasion, and moisture resistance, often classified as None, Limited, Basic, Good, or Super .
- Hybrid Designs: Some cables combine twisted pairs, optical fibers, power elements, and coaxial lines to simplify infrastructure and installation, e.g., FTTA applications with DC + optical fibers . Common industrial cable models include NOMAK, JAMAK, LiYCY, Li-02Y, Tray Cables (TC) for analog automation, and Cat 5E, Cat 6, Cat 7 for industrial Ethernet and high-speed data links

Article Content

Jan 30, 2026

General Catalogue

Our philosophy is to supply the best cable for each application, within the shortest possible delivery time and with no minimum length

Feb 02, 2026

Multi-mode optical fiber

Multi-mode optical fiber is a type of optical fiber mostly used for communication over short distances, such as within a building or on a

Apr 21, 2026

Fiber Optic Cable Types – Multimode and Single Mode

Fiber Optic Cable Types – Multimode and Single Mode Application Fiber Optic connectors

Oct 31, 2025

Specialty Optical Fiber Information

For more information on fiber types, read How to Select Fiber Optic Cable. Optical Fiber Specifications

Sep 16, 2025

Fiber Optic Cable Types | Omnitron Systems Guide

Explore fiber optic cable types, features, and applications. Omnitron Systems explains single-mode, multi

Feb 08, 2026

Fiber Optic Cable Models

Conocer los diferentes modelos de cables de fibra óptica y sus aplicaciones específicas le

Jan 15, 2026

Fiber Optic Cable Types Explained: Choosing the Right Fiber Cable

Fiber Optic Patch Cable Types and How to Choose the Right One? Fiber optic cables come in various types based on

Aug 13, 2025

Special Cables Catalogue | PDF | Information And Communications ...

This document provides specifications for several types of special cables produced by UIC El Sewedy Instrumentation Cables

Dec 16, 2025

Fiber Optic Cable Types Explained

Our comprehensive guide to types of fiber optic cables. Learn all about the differences between single mode and multimode cables,

Feb 16, 2026

Cables with special fibers

Cables with special fibers are tailored to specific applications, offering a more precise fit than standard

Dec 18, 2025

Optical cable model meaning and optical cable

For communication engineers, they often come into contact with fiber optic cables. At this

Jun 08, 2026

Optical Cables

The following section refers to both optical cables that constitute a part of AOC cables as well as standalone optical

Aug 27, 2025

Fiber optic cable types and selection guide

In this article, we will explain the key points for choosing a fiber optic cable in

Jul 11, 2026

Fiber Optic Cable Selector

Compare models and choose the right option for you. In view of the increasing demand for bandwidth, low insertion loss, protection

Jul 25, 2025

Fiber Optic Cables: Speed, Standards, and More

This article explores the differences in fiber optic cables and examines their use in fiber optic cable assemblies, wire harnesses, and

Apr 03, 2026

Special Electric Cables, Fiber Optic Cables, Cables Hybrids ...

Dozens of years experience in optical fiber. Metallurgica Bresciana S.p.A., since 1968 designs and manufactures special precision

Jun 03, 2026

Recommendation ITU-T G.652 (08/2024)

This document outlines the specifications for a single-mode optical fiber and cable designed for use around the 1310 nm zero

Sep 21, 2025

Specifications For Fiber Optic Networks

Specifications For Legacy Fiber Optic Networks A listing of many fiber optic LANs and links available in the last 30 years, with basic

Feb 17, 2026

Understanding and Specifying Optical-Fiber Cables | EC& M

Therefore, it is important for installing contractors to know how to write effective specifications. However, many

May 24, 2026

Customized Special Fiber Optic Cables | Tailor-Made | ETK Kablo

ETK Kablo offers tailor-made special fiber optic cables designed to meet unique client specifications, providing solutions for network

Jan 04, 2026

Special Optical Fiber Cable Types & Applications

Special optical fiber cable refer to the optical cables used in specific environments. Such as commonly used hybrid

Oct 04, 2025

Handbook Optical fibres, cables and systems

Moreover, the optical plant needs a lot of complementary hardware (passive nodes, optical distribution frames, joint closure,

Jul 16, 2026

Fiber Optic Cable Types: A Complete Guide

The plethora of fiber optic cable types can seem overwhelming, but choosing the right cable

Oct 29, 2025

Optical Fiber and Cables | Springer Nature Link

Next, we introduce the optical fiber unit, a basic element used to bundle the fiber into cable, such as an optical fiber ribbon or loose

Jan 16, 2026

Product Specification Sheets

Our team will make sure the configuration is tailored to your needs and will provide a detailed quote. Email us using the Request a

Oct 23, 2025

Optical Fiber Product Information Sheets

An all inclusive list of the various optical fiber specification sheets.

Sep 20, 2025

Single-mode optical fiber

In fiber-optic communication, a single-mode optical fiber, also known as fundamental- or mono-mode, is an optical fiber designed

May 19, 2026

Fiber Optic Cable Types – Multimode and Single Mode

Single Mode cable has a much smaller core (8-9um) than multimode cable and uses a single path (mode) to carry the light. The main

Contact Us

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