

The diagram illustrates the RAS-1000 system architecture. At the top center is the **Control Center**, which includes a computer and is connected to the main unit via **RS-485** and **Ethernet**. The main unit, labeled **RAS-1000**, features a **POWER SUPPLY** (100W-1000W) and a **Control Panel** with **SPD** and **MDI** ports. It is connected to various peripheral devices through **RS-485** lines:

- Temperature 1** (Thermometer icon)
- Temperature 2** (Thermometer icon)
- Humidity 1** (Water drop icon)
- Humidity 2** (Water drop icon)
- Humidity 3** (Water drop icon)
- Humidity 4** (Water drop icon)
- Other RS485 Device** (Generic device icon)
- Smart Device** (Smartphone icon)
- Door Control** (Door icon)
- Smoke Alarm** (Smoke icon)
- CO Alarm** (Gas cylinder icon)
- AC Voltage** (Voltage meter icon)
- DC Voltage** (Voltage meter icon)

A **Switching Power** source is also connected to the main unit. The main unit is further connected to a **Switching Power** source and a **Control Panel** with **SPD** and **MDI** ports.

Emergency connection, also known as cold splicing, uses mechanical and chemical methods to fix and bond two fibers together. This method is quick and reliable, with typical attenuation ranging from 0. In many applications of fiber optics, it is necessary to connect fiber ends (terminations) in some way such that light from one fiber can get into the other fiber without losing too much of its optical power. There are. Here we mainly introduce three commonly used fiber optic connection methods. the optical fibers are butted by compressing a folded sheet metal to fix the terminals of two optical fibers. That is usually done for permanent connections, but it. Optical communication is now the dominant network transmission method in society, which is nothing more than because it has many advantages and is now a new transmission medium. The time that light transmits in the optical fiber will also have loss, and this type of loss is mainly due to the. The fiber optic quick connector/cold connector is a very innovative field-terminated connector, which contains factory-installed optical fiber, pre-polished ceramic ferrule and a mechanical splicing mechanism.

Article Content

Nov 15, 2025

Optical Fiber Jointing Methods

The document discusses methods for joining optical fibers, including fusion splicing and mechanical splicing. Proper preparation of

Oct 29, 2025

8.2: Mechanics of Fiber Joints

8.2 Mechanics of Fiber Joints A significant factor in any fiber optic system installation is the requirement to interconnect fibers in a

Jul 09, 2026

Optical fiber cold splicing and hot melting steps

The first monitoring and sorting of optical fiber quick connectors and optical fiber cold splices will play an irreplaceable

Dec 06, 2025

Method for connecting cold joints for optical cables

Overview Emergency connection, also known as cold splicing, uses mechanical and chemical methods to fix and bond two fibers

Jul 01, 2026

Fiber Couplers and Connectors

A permanent or semi permanent connection between two individual optical fibers is known as fiber splice. And the process of joining

Jan 06, 2026

Optical fiber termination methods hot welding, cold joint, and coupling ...

There are 3 types of optical fiber termination methods for different optical communication projects and technical

Oct 31, 2025

How to do the cold splicing when the fiber optic cable is broken?

The most detailed cold splicing procedures for broken fiber optic cable. You can source

May 22, 2026

Types of Fiber Joints

Types of Fiber Joints Optical fibers can be joined together, such that light is efficiently transferred from one fiber to another. There are

Jan 09, 2026

fiber optic cold connection

Fiber optic cold connection, also known as mechanical splicing, is a widely used method of connecting optical fibers in a

Aug 17, 2025

Optical Fiber Cold Joint Market Driven by Accelerated FTTH Rollouts

The baseline scenario for the optical fiber cold joint market from 2026 to 2035 projects steady, project-driven growth

Aug 01, 2025

Optical Fiber Cold Splicing and Fusion Splicing

It is used to connect optical fiber or optical fiber butt pigtail, which is equivalent to making a

Jan 11, 2026

9. Joints Between Fibers

9. Joints Between Fibers The method most often used to connect two single-mode fibers is the simple butt joint: the fiber endfaces

Jun 03, 2026

The Difference Between Optical Fiber Cold Splicing and Optical Fiber

When installing a fiber optic network, connectors are required to connect both ends of the fiber optic cable. Common

Jul 14, 2026

Tutorial Passive Fiber Optics, Part 6: Fiber Joints

Understanding Fiber Joints in Passive Fiber Optics Fiber optics technology has revolutionized communication systems with its high

Aug 29, 2025

Cold joint terminal for optical fibers

the present invention relates to a connection unit used for butt installation of the optical fibers and particularly relates to a cold joint

Aug 07, 2025

FOA Standard For Installing Fiber Optic Cable Plants

In premises applications, fiber optic cables can be used as the backbone cabling in a traditional structured cabling star network,

Sep 01, 2025

Effective connection of fiber optic cables: Fiber optic joint

Fiber optic couplers at the Onninen wholesaler In the Onninen installation wholesaler you will find fiber optic joints of

Jul 16, 2026

Joining Fiber Cable - What Are the Options?

This offers the best quality connection of all in-field options in that the fiber ends are lined up and welded together. No excess cable

Apr 08, 2026

The principle and characteristics of optical fiber quick connector/cold ...

The principle and characteristics of fiber optic quick connector/cold connector. The wide application of fiber to the home

Jun 10, 2026

Optical Fiber Connectors, Splices, and Jointing Technology

The optical source, the number of joints and their location along the fiber, and the mode-mixing properties and differential mode

Dec 11, 2025

The FOA Reference For Fiber Optics

Fiber optic joints or terminations - where cables are terminated - are made two ways: 1) connectors that mate two fibers to create a

Jul 29, 2025

Tutorial Passive Fiber Optics, Part 6: Fiber Joints

Various optical components such as fiber couplers and laser diodes are often sold with fiber "pigtailed". This means that some fiber

May 28, 2026

4 Methods of Fiber Connection You Need to Know

This blog introduces 4 Methods of fiber connections, including: Active Connection, Cold Splicing, Fusion splicing and

Sep 14, 2025

Fiber optic quick connector cold joint

The principle of the preset optical fiber quick connector/cold joint is described in detail below:

Sep 14, 2025

Optical fiber fast connector/cold connection skills

Optical fiber fast connectors, also known as cold connectors, are becoming increasingly popular due to their ease of use

Apr 28, 2026

The FOA Reference For Fiber Optics

Fiber optic joints or terminations are made two ways: 1) splices which create a permanent joint between

Nov 26, 2025

Optical fiber cold splicing and hot melting steps

Optical communication is now the dominant network transmission method in society, which is nothing more than

Sep 28, 2025

OPTICAL FIBER CABLE JOINTING TECHNIQUES FOR OPTICAL SUBSCRIBER LINES.

Abstract The design and performance of various optical fiber cable jointing techniques for use in constructing optical

Nov 13, 2025

Optical fiber connector

Optical fiber connectors are used to join optical fibers where a connect/disconnect capability is required. Due to the polishing and

Contact Us

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

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

Email: sales@ntmmgroup.co.za

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town,
7441, South Africa

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

