

Remote Monitoring Installation Solution for Japanese Cable Reeling Frames

Article Overview

Advanced remote monitoring for cable reeling frames can be achieved using fiber-optic sensing, real-time dashboards, and power line communication systems to track mechanical stress, temperature, and operational anomalies.

Fiber-Optic Sensor Integration

One effective solution is the PROTON IQ system, which integrates fiber-optic sensors directly into medium voltage reeling cables. This system measures both strain and temperature along the cable during gantry operations, providing real-time data on mechanical and thermal stress. The collected data is transmitted to a monitoring dashboard accessible via smartphones or tablets, highlighting high-stress points and enabling root-cause analysis to prevent cable damage and optimize asset utilization (Alson Marketing Services) .

Power Line Communication-Based Monitoring

For underground or enclosed cable reeling frames, Sumitomo Electric has developed a remote monitoring system using existing power line shielding layers as data transmission lines. This approach eliminates the need for new communication infrastructure, allowing sensor data to be transmitted to cloud servers for storage and analysis. The system can monitor equipment temperature and insulation conditions in real-time, supporting predictive maintenance and reducing manual inspections (Sumitomo Electric)

Article Content

Jan 18, 2026

Reeling Cable Installation: Best Practices for Reels & Spreaders

Master reeling cable installation for motorized reels and spreaders. Learn about tension control, bending radius, and anti-torsion

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Cable Reeling Machines: Types, Applications and Benefits

What are Cable Reels or Cable Reeling Machines? Cable reeling machines, or simply "cable reels," are specialized equipment

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Remote monitoring of FTTx | Fiber Optic Reflector

Monitoring system with fiber optic Reflector detects the slight fiber defects and tells us its precise place. The proactive monitoring

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Reeling Cable technology Solutions for Mobile Machinery in Ports ...

Explore our technology blogs on reeling cable for mobile machinery. Learn about flexible power cables used in port terminals and

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Subsea Monitoring & Controls | Full Insight & Control | Seatools

Monitoring, controls, and parts for controlled and accurate cable and pipeline installation Seatools delivered numerous systems and

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Cable Monitoring System | Rugged Monitoring

Real-time cable monitoring system to detect faults in electrical cables. Improve reliability with predictive

Jun 19, 2026

Reeling cables

Bröckskes offers reeling cables for different application fields. It doesn't matter if you are looking for cables with or without total

Sep 27, 2025

The JTF SMART Subsea Cable Initiative Science Monitoring And

The 10th Workshop on SMART Cables (January 23-24, 2025) brought together representatives from UN agencies,

Sep 26, 2025

Submarine Cable Installation

An installation of submarine cables is a big project accompanying choice of cable landing places, routes selection for cable laying

Jul 05, 2026

The Strategic Future of Subsea Cables: Japan Case

Japan, an island nation dependent on subsea cables and a nexus for Asia-North America

Oct 04, 2025

PROTOLON(IQ) - a smart reeling cable system saving the day.

In short, by monitoring and being able to process data in real-time, you will be able to vastly prolong the lifetime of the cable,

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ITPro Today, Network Computing, IoT World Today combine

ITPro Today, Network Computing and IoT World Today have combined with TechTarget . The page you are

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Installation instructions for reeling cables

In case of complete extension of the cable at least 2 windings shall remain on the reeling drum. For fixing the other cable end Kellem

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Sumitomo Electric Industries : World's First Development of Remote ...

Sumitomo Electric Industries, Ltd. and TEPCO Power Grid, Inc. have jointly developed a remote monitoring system that readily uses

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World's First Development of Remote Cable Monitoring System Using ...

Press Release World's First Development of Remote Cable Monitoring System Using Existing Underground Power

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Reeling Drums Cables

An example of this is the Tratos ESDB cable series, designed for high-speed reeling applications, where the tightening of the

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Reeling Cables

If you cannot find the right cable for your specific application in the following overview, please contact us. We will be happy to work

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Deploying Remote Monitoring Solutions: Best Practices and Step-by

As the world grows more and more dependent on telecom infrastructure, the need for effective remote monitoring

Aug 12, 2025

Reeling SyStemS

This workbook asks questions; it suggests typical solutions; and it provides check lists which will assist you in reviewing the items

Nov 01, 2025

Cable Drum & Reel Handling Equipment

Operation: are you looking for pedestrian-operated solution, or would a remote control solution be more suitable? Our expert team

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Power Cable Monitoring System

The power cable monitoring system provided by Sumitomo Electric, such as OPTHERMO™ and AOLCM system, contributes to

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INSTALLATION NOTES FOR REELING CABLES

With cable grips, there is no load point that could lead to wire breaks, such as those caused by cable clamps. Cable grips are used

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Cable Monitoring Solutions

NKT also uses real-time temperature sensing and vibration monitoring to detect anomalies early and

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Wiley Online Library

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

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Wireless remote monitoring system | Monitoring and control

We install a simple remote monitoring system at site which has 3G wireless communication function and image transmission

Mar 09, 2026

Cable Monitoring Solutions | NKT

Improve the performance of your network right from the start with our specialized cable monitoring services. Our advanced

Apr 06, 2026

Wide Area Monitoring System | Yokogawa Electric Corporation

The Wide Area Monitoring System is a simple and low-cost solution for building a remote monitoring system to solve such facility

Apr 14, 2026

NKT introduces next generation monitoring system for high-voltage

With a new Cable Laying Monitoring System at the cable-laying vessel NKT Victoria, NKT again raises the bar for

Nov 05, 2025

Smart Sensing Power Cable Monitoring | OptaSense

Power monitoring using distributed fiber optic sensing technology, the OptaSense Integrated

Jun 20, 2026

Advanced Cable Monitoring for High-Voltage Networks | Megger

This innovative solution identifies signs of degradation in cable joints and terminations, which are responsible for 69% of all cable

Apr 21, 2026

Next generation monitoring system for high-voltage

She installs high-voltage offshore cable systems with exceptionally high precision based on

Dec 25, 2025

Application of a Vision System to the Monitoring of Cable Structures

The current paper describes the development and implementation of a vision system in the context of the monitoring of

Dec 01, 2025

World's First Development of Remote Cable Monitoring System

Power grid companies have power transmission line facilities installed in underground tunnels, pipelines and maintenance holes.

Contact Us

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