



PROTELION

Use Cases

Highly Secure Communication for Renewable Energy Systems

Even for providers of renewable energy solutions, like solar and wind power plants or district heating, it is nowadays essential to protect their businesses and installed power facilities from cyber threats. In this regard, Protelion has developed a range of cyber defense products specifically designed to the unique needs of renewable energy producers. Protelion Security Solutions provide comprehensive protection against a wide range of cyber threats, including malware, ransomware, phishing scams, hacker attacks and more. Protelion Security Solutions use advanced technologies like machine learning and artificial intelligence to detect and respond to cyber threats in real time thereby keeping your facilities safe and secure.

Duties and As-Is Situation for Renewable Energy Systems

Collecting system data from various sources, such as network traffic logs and endpoint devices (panels, rotors, heat pumps etc.) which is transferred to a central repository where it is processed and analyzed

Extensive use of operational technology which was not designed to be connected to the Internet and lacks robust built-in security

Renewable energy facilities are modern high-tech software-controlled installations and prone to vulnerabilities and cyber attacks

As part of a national energy or power grid, continuity and availability of contracted supply capacity is imperative in order not to jeopardize national energy security

Project Specification

Due to the highly software-controlled processes in modern renewable energy facilities, they demand a comprehensive protection against a wide range of cyber threats

Protection of all endpoint devices from physical and virtual access (cyberspace, cloud, Internet)

Protected data transfer between endpoint devices, facilities and central repository (database, computing center)

Field and maintenance workers need for their field diagnostic readouts and video inspection of critical assets by drones a secure and protected data transfer

Project Implementation

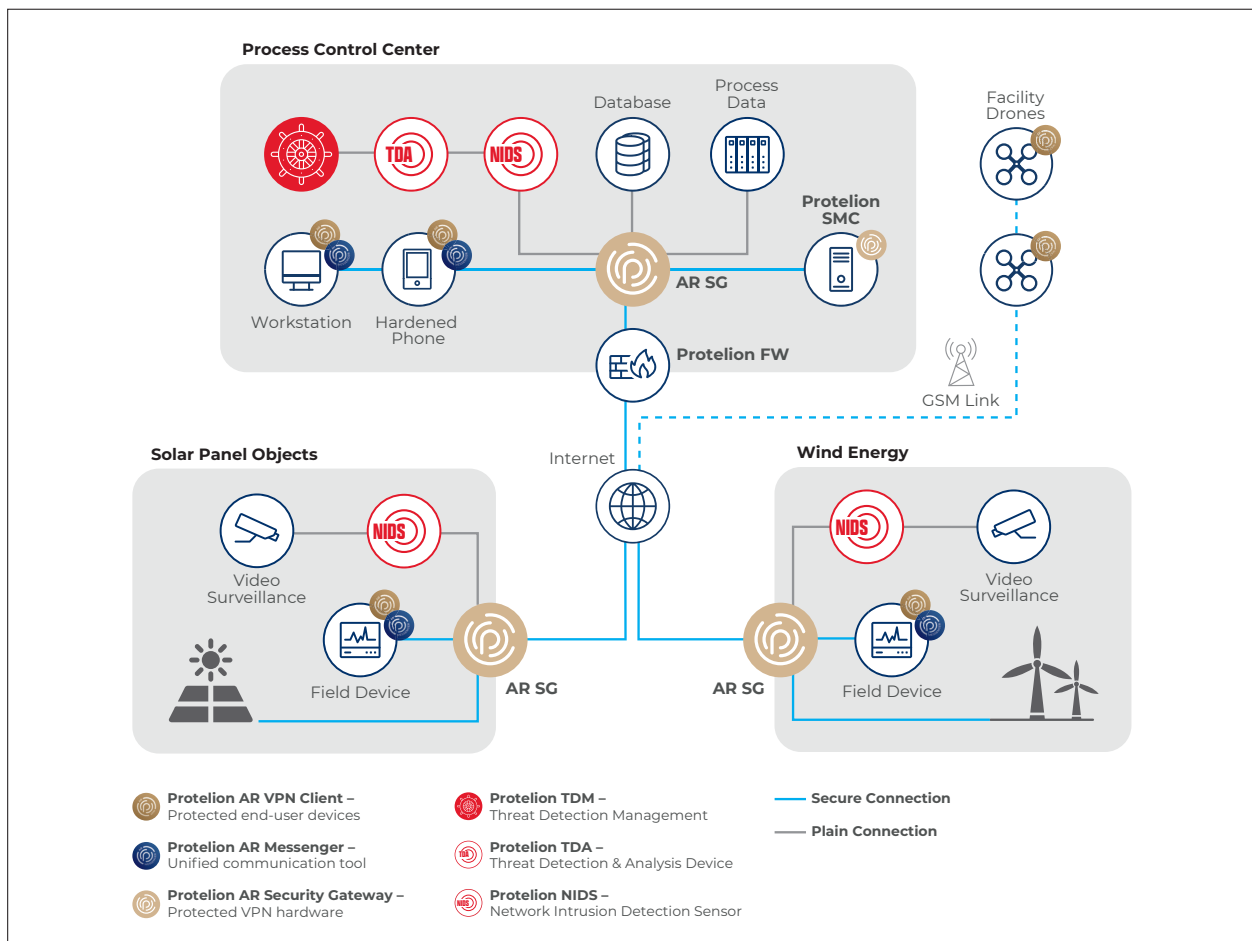
1 The Protelion TDR-System detects and analyzes malware activities and provides fast real-time alerts to security officers. It can easily be integrated in an existing SIEM

2 Endpoint devices are protected against various types of cyber threats such as malware, ransomware, zero-day exploits and fileless attacks

3 All communication and data are encrypted and can be sent over common unsecure public channels. The Protelion Security Solutions provide the highest protection against cyber attacks and guarantee confidentiality, integrity and secure operation of the facilities

4 The Protelion Security Solutions provide secure and controlled access to the facility's video surveillance cameras and patrolling drones by protecting the transmission and exchange of their critical data and image information through Protelion's encryption algorithm

Scheme for Renewable Energy Systems



Protelion Features

Comprehensive Protection

Protelion Security Solutions offer comprehensive protection against a wide range of cyber threats, using advanced technologies to detect and respond in real-time and minimizing thereby the impact of cyber attacks

Customizable Solutions

Protelion Security Solutions are highly scalable and customizable to meet the companies unique demands and ensuring the high level of protection required

Easy to Use

Protelion products are designed to be user-friendly and easy to use. Therefore, customers can stay focused on their businesses while Protelion takes care of your cyber defense

Operational Availability

Protelion Security Solutions provide a protected IT infrastructure for energy production and secure remote access to control and monitoring sensors. They also secure endpoint devices' firmware and sensitive update processes