CompuDiode

Did you ever worry about your control circuitry? What are the effects if this network is taken over by hackers?

CompuDiode is the solution to protect your vital infrastructure against attacks from the outside so that you can be sure that your control circuitry can't be taken over.

Easy to integrate and to manage, only one traffic direction due to the air gap, specific proxies for optimal security by two NextGen firewalls.
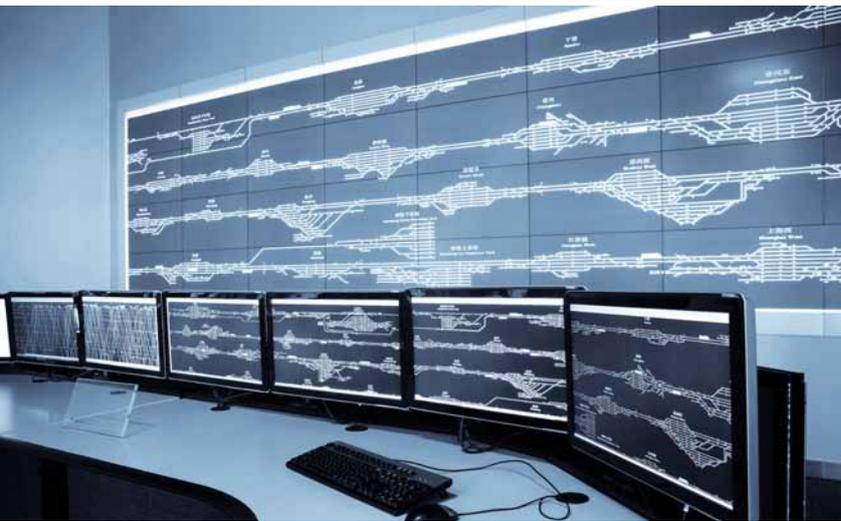
CompuDiode has it all!

SCADA / ICS
Security

Compumatica
SECURE NETWORKS

English

Cybersecurity with a personal touch

// CompuDiode

Vital infrastructures are controlled via several Process Control Systems (PCS). These were until recently specific systems. To increase efficiency Process Control Systems are more and more connected to the office network and internet.

Due to the connection of the Process Control Systems to the internet and that they don't always have the latest software versions there is a risk that these systems can be hacked. The effects of a successful attack of a nuclear power station, airport or railway network are unforeseeable. Criminals nowadays know that they can earn a lot of money by manipulation of control systems like smart meter systems.
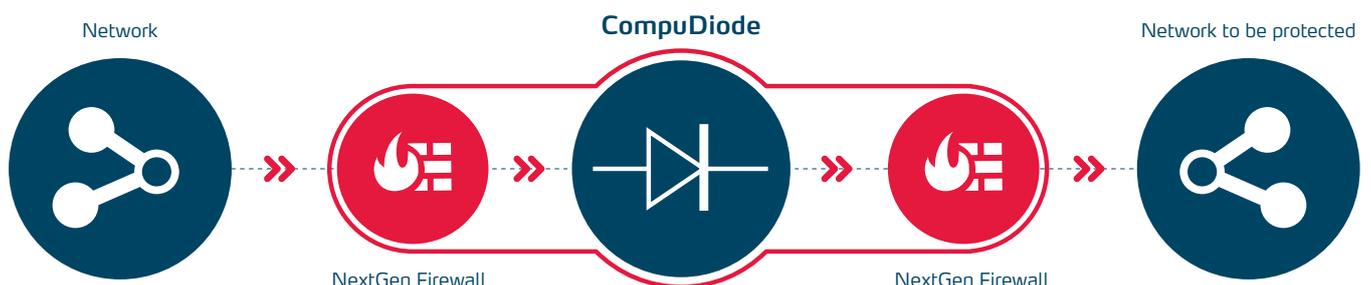
CompuDiode

The solution for this security issue is CompuDiode by Compumatica. With CompuDiode access to the PCS systems from the internet is protected which makes attacks from the outside impossible.

CompuDiode consists of an air gap and two NextGen firewalls (CompuWall). An air gap is a fiber connection and works as a diode whereby only one traffic direction is possible. The diode separates the two networks from each other. Attacks from the outside are not possible anymore.

To provide an extra secure solution CompuDiode contains two NextGen firewalls, one for each network. The NextGen firewall combines simple management with a high level security and a powerful working due to the security principle: "Everything not explicitly allowed is strictly forbidden." The responsibility of data control is thus transferred from the employee to the administrator.

CompuDiode is very suitable for industrial environments because it is shockproof, works at temperatures between -20° and +55° Celsius, doesn't contain any fans and has a long life time.

Network   **CompuDiode**   Network to be protected

NextGen Firewall   NextGen Firewall

// Features

Network completely shielded

With CompuDiode the Process Control Systems are protected against attacks from the outside. The air gap only allows one-way traffic which ensures that the PCS systems are not reachable from the internet.

Extra security by firewalls

In principle, the air gap is sufficient to secure the PCS systems against attacks from the outside. By the addition of two NextGen firewalls two extra controls are applied. Therefore, CompuDiode is extra secure.

Classified networks

Due to the physical separation of the NextGen Firewalls, CompuDiode can be integrated very well as a separation between unclassified networks and thus forbids the traffic from high to low networks. This is also known as red/black separation.

Efficient central management

The control of CompuDiode is very easy. The air gap doesn't need to be configured and works from the moment when it is connected to two networks. Both firewalls can easily be managed via the web management.

Special proxies

CompuDiode contains proxies which are specifically developed for industrial environments. These proxies are part of the internal NextGen firewalls.

Security principle firewall

Security is for Compumatica of ultimate interest. Misconfiguration with security leakages as a result is excluded because the NextGen firewalls in default modus know the following principle: "Everything not explicitly allowed is strictly forbidden."

Sustainable solution

With multifunctional applications, CompuDiode is a sustainable solution. CompuDiode can be installed in many ways and has a long life time. CompuDiode is suitable for mobile, industrial and office environments.

Suitable for industrial environments

CompuDiode is very suitable for industrial environments because it is shockproof, works at temperatures between -20° and +55° Celsius, doesn't contain any fans and has a long life time.

"Specially designed for the protection of industrial environments"

// Certified and reliable solution

The NextGen firewalls of the CompuDiode are based on the technology of the CompuWall. They are certified by the Dutch government for Departementaal Vertrouwelijk (DV) use. This means that the product is approved for use by the Dutch government.

CompuDiode is developed by Compumatica in the Netherlands and Germany and doesn't contain any backdoors. Nobody has access to the key material except for the customer. To confirm this statement every customer is allowed to have a look into the source code.

"CompuDiode is 100% free from backdoors."

// Compumatica

In 1991, when almost nobody was working with cybersecurity, Compumatica was founded and is since then a leading company in IT security developments. Compumatica has a complete and modern product portfolio of IT security solutions with use of new technologies and experience of cryptography.

Compumatica secure networks is a fully independent private company with several offices in Europe. The customers of Compumatica are governments and companies listed in the top 500.

Compumatica develops, produces and implements solutions with a high security grade without backdoors. During the development process of the solu-

tions, security is the main focus besides simple implementation and integration, easy management and usability for the end user.

Every single product goes through a quality assurance phase in which it is subject to a long-term test. Long product life times with updates and upgrades are guaranteed for each solution.

With our slogan "Cybersecurity with a personal touch" we point out that customers are our first priority. Do you have questions, do you need support, do you want to upgrade products to the latest solutions, or do you have special demands? We are pleased to help you.

Petra van Schayik
CEO Compumatica

"Cybersecurity with a personal touch"