TeleControlNet

Inter Act

industrial automation

Inter Act

Inter Act has been active in Europe as an industrial automation system integrator since 1989. From the year 2000 onwards Inter Act has focused on building web and cloud-based industrial Internet of Things (IoT).

This has resulted in the development of the SaaS TeleControlNet and associated edge controllers called TeleControllers. TeleControlNet is an End-to-End solution and used for central monitoring, control and management of remote process installations and measuring locations.

Important TeleControlNet functions

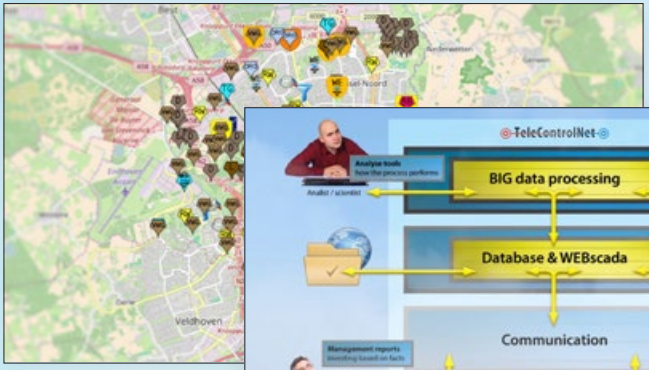
- Connectivity to the physical things in IoT (brand independent)
- BIG-data storage
- WEB-based process control
- GIS- and SCADA-based user interfaces
- Real Time Control of remote objects
- Analytics of BIG-data
- Reports & dashboards
- Smart alarming
- Integrated Asset management tools for predictive maintenance

Typical applications

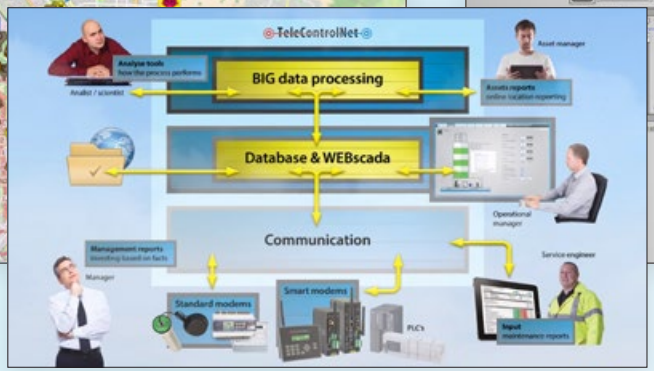
- Wastewater treatment plants and pumping stations
- Drinking water installations
- Measuring systems in air, soil and water
- Surface water quality and quantity monitoring
- Industrial production process monitoring and benchmarking
- Remote stock monitoring
- Production registration and reporting systems

Market regions

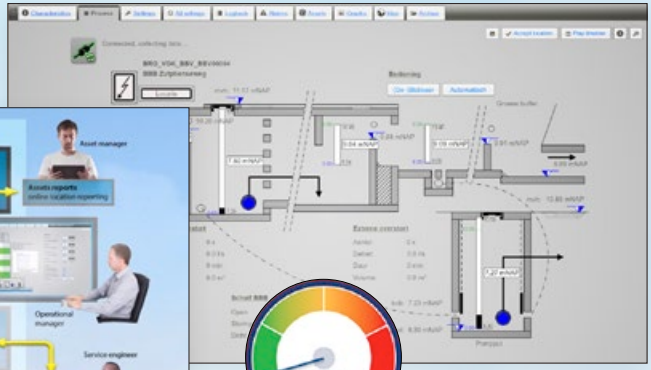
- Applications worldwide



Smart City



TeleControlNet IoT-suite



Process Control

Process Forecaster

TeleControlNet is an End-to-End solution.

It reaches from physical layer to applications.
It improves processes and increases revenues with smart applications.

Edge computing & Connectivity

The edge controllers of Inter Act, called TeleControllers, combine edge computing and connectivity in one device. They connect, via an internal modem, the physical layer via I/O, or serial bus, to exchange data with the central TeleControlNet server in the cloud.

Common features of TeleControllers:

- Data buffering & real time alarming.
- Downloading control commands from central server to local processes.
- Secured M2M connections to the central server via named networks, APN.
- Connecting all types of devices such as PLCs, smart sensors, etc. (brand independent).
- Multiple wireless communication, M2M, LoRa, Sigfox, nbIoT.

LoRa IoT controller

Features

- With digital inputs and outputs, for monitoring small processes.
- Accepting data from various types of sensors.
- On board fast pulse counters: kWh, flow rate, ...
- Battery powered.
- Application examples: for small remote process controls, e.g. irrigation systems.

LoRa smart signalling lamp

Features

- Forwarding alarms: e.g. high level and pump failure.
- Remote reset function for thermal failure.
- Forwarding small amounts of measured data: e.g. analog level, pumping time, pump starts.
- Application examples: dedicated to monitoring of mini sewage pumping stations.

JAZZmin

M2M

Features

- Controlling processes via I/O.
- Local control panel.
- Storing and communicating digital and analog input and output data.
- Application examples: pump control for 1 or 2 pumps pumping stations.

TC315

M2M

Features

- Controlling processes via (existing) PLC controllers.
- Existing PLC can be connected without software change.
- Suitable for medium-sized installations.
- Application examples: machinery and process installations.

TC415

M2M

Features

- Controlling processes via (existing) PLC controllers.
- Existing PLC's can be connected without software changes.
- Suitable for large installations with multiple PLCs in networks.
- Local WEBscada user interface.
- Application examples: industrial process installations.

TC OEM

M2M

Features

- Tailored to customer specifications.
- Custom-specific user interface and reports.
- Application examples: on request.

TeleControlNet

TeleControlNet is a SaaS for operating remote installations.

The installations (regardless of which brand) are connected via TeleControllers.
Remote sensors communicate directly via their own modems. Users can operate their installations in their own protected TeleControlNet domain in the cloud.

All collected data is processed into effective and understandable information for both operational and management purposes. TeleControlNet is based on 17 years of experience in industrial automation and has more than proven itself as technology for smart cities, infrastructure and industrial applications.

What can be achieved with TeleControlNet

Increased assets utilization (up to 10% gain)
- Reduced unplanned downtime by predicting errors and taking proactive action.

Increased productivity through advanced process control (up to 25% gain)
- Proactively maintaining the effectiveness of control loops, controllers and models.
- Automatically adjusting the control to new operating conditions and process changes.
- Alarming of critical measurement values.

Reduced maintenance costs (up to 10% gain)
- Proactively responding to minimize emergencies and damage to equipment.
- Predictive maintenance based on the identified condition of the asset.
- Improved integral reliability of processes and extended lifespan of assets.

Increased operational efficiency (up to 10% gain)
- Automatic monitoring and adjustment of energy consumption.
- Improvement of engineering effectiveness through continuous monitoring and cooperation with remote experts.
- Easy access to all required information.
- Increased efficiency through an integrated decision support environment.

Improved safety
- Minimized risks through more stable processes.
- Exclusion of production interruptions due to safety checks.

For more information visit **www.interact.nl**

TeleControlNet "The most versatile IoT suite for large and small applications."