

Customer: Bosch
Country: Germany
Solution: On-demand Remote Connectivity



Benefits

- Software update can be done remotely
- Allow preventive maintenance
- Provide customers with quick remedies to any problem

“It means substantial efficiency gains for us and our customers.”

Yassin Ouchen of Bosch KWK

Maximizing efficiency with Ewon

As natural resources are getting scarcer, it is increasingly important to get the most out of the energy sources we have. Using combined heat and power units is a smart way to optimize the use of energy and get both heat and power from the same generator. In Lollar, Germany, Bosch KWK Systems develops state-of-the-art heat and power units enabling their customer to become more energy-efficient. But as all advanced machinery, Bosch’s heat and power units need maintenance every once in a while. With Ewon remote routers, Bosch found a way to do this remotely.

Making the most of gas

Bosch’s combined heat and power units obtain what is possible from natural gas, sewer gas, or biogas. And the output is impressive. BOSCH KWK’s systems range between 12 kW to more than 2 Megawatts of electricity and produces enough heat to supply an entire district.

One of Bosch’s trademarks is compact construction. In the tradition of German engineering, every centimetre counts. This enables the plants to be easily accommodated in buildings and it also facilitates transport. This is apparently a good concept, as demand is rapidly increasing.

But as more systems are being deployed, Bosch also needs to face an increasing need for maintenance. “The more systems that are running, the higher the expense in service and maintenance, so we wanted to find a way to do this remotely” says Yassin Ouchen of Bosch KWK. “Our main objective was to find a way to do software updates remotely at any time. However, many of our units are located out in the sticks, where there is normally no broadband connection.”

Therefore, Bosch looked for solution which could communicate via the cellular network.

Bosch compared a wide variety of remote management systems and finally chose Ewon. There were many features that suited Bosch well, for example the many integrated interfaces such as HSDPA, Serial, MPI and Ethernet.

By using Ewon routers, Bosch can provide their customers with quick remedies to any questions or errors. If a customer calls, a skilled engineer can immediately log in to the relevant system and see what can be done.



ORC (Organic Rankine Cycle) systems generate energy from process heat originating from industries, waste disposal sites and also as a by-products from electricity generation. Also here, remote maintenance is provided by Ewon.

Preventive maintenance is also possible, as Bosch can get notifications whenever operation hours or other parameters reach certain levels, or when machines exceed their service time. Statistics and analytics is made possible as control system logs, Modbus logs etc. are read into the Ewon routers.

Simplifies commissioning

Also during the commissioning phase, the possibilities for remote maintenance are invaluable: “When we set up our systems, it may be necessary to go back and do small adjustments – since this can now be done from our centre with a few mouse clicks, it means substantial efficiency gains for us and our customers” explains Mr Ouchen.

A centralized monitoring system

Bosch KWK has developed its own remote maintenance portal under the guidance of Yassin Ouchen. All data is directed to an internal server, which can be accessed anywhere using a web browser. After logging in, service technicians see the systems in their area. By using a filter, you can set up which systems that should be shown – for example those with any irregularities or where an alarm has been triggered. In urgent cases, messages can be sent from the server via email or SMS, so no time is lost.

A dashboard gathers all the system data in a single view. There is also a log with all processes and historical data, allowing an easy overview at a glance.

More than remote maintenance

“We also use the Ewon routers to synchronise the times of all systems,” adds Yassin Ouchen. “So the service provides the time which is then transferred to all the systems via the router.” But it is not just the technical possibilities of the Ewon router that convinced Bosch KWK. The slim design also corresponds to Bosch’s philosophy of saving as much space as possible.

Bosch’s combined heat and power units are delivered to customers all over the world and Ewon remote maintenance routers, distributed by our German distributor- Wachendorff.

“With Ewon, small adjustments can now be done from our centre with a few mouse clicks.”



Learn more on www.ewon.biz

The Ewon Cosy is an industrial VPN gateway designed to offer easy remote access, across the Internet, to machines and installations on customer sites or in the field. OEMs and System Integrators can troubleshoot machines remotely without going on site, drastically reducing support costs.

