

# ENERGY AND NATURAL RESOURCES

Connectivity Solutions



  
**B&B ELECTRONICS**  
Make The Right Connections



## ***Extending the Network Edge for Specialized Industries***

**We offer a complete line of products designed to expand networking capabilities into energy, natural resources and other demanding environments where monitor and control were previously unreachable. Learn more about these solutions...**

From energy production to wastewater treatment, utilities are expected to deliver uninterrupted, trouble-free service. B&B Electronics provides the connectivity solutions and the rugged, reliable networking devices that will keep your network up and running, even in adverse circumstances and harsh environmental conditions. Wired or wireless, from Modbus to TCP/IP, we'll help you create and maintain network connections that let you monitor and control your equipment wherever you may need it to be.



## Energy Production and Distribution and Natural Resource Management

Energy producers and facilities that safeguard natural resources, such as water and wastewater treatment plants, demand an efficient and reliable data communications infrastructure. B&B Electronics can help you integrate the latest data connectivity solutions with your legacy systems to ensure your systems continue to provide dependable performance. For more than 30 years, B&B Electronics has been developing an impressive suite of products to support your energy generation and distribution network infrastructures. Today, you can put that expertise to work for you. Whether you're designing a new system, retrofitting an existing one, or exploring connectivity options at your network's edge, B&B Electronics engineers can help you re-image your network configuration, then help you select and implement the data communication solutions necessary to make it a reality. Technical support will be by your side every step of the way.

Our rugged solutions are proven in harsh environments from mountaintops to deserts, providing trouble-free data communications between many types of device interfaces. B&B Electronics offers more than 7,000 products for machine-to-machine (M2M) connectivity and data communications solutions:

- **Class 1/Division 2 rated products**
- **Wireless cellular routers, WiFi cellular routers**
- **Wireless radio modems, I/O**
- **Wi-Fi access points, routers, bridges, serial servers, modules**
- **Serial converters, isolators, repeaters, surge protectors, cards**
- **Ethernet switches, routers, extenders**
- **Ethernet serial servers, gateways, media converters**
- **Custom and OEM engineered connectivity solutions**

For more than three decades, B&B Electronics has built a reputation as a global source for best-in-class rugged, reliable wired and wireless connectivity and communications solutions. Backed by strong technical support online, on the phone and in the field, B&B Electronics' products are known for being simple to order, simple to use and simple to install.

We design, build and deliver connectivity and communication solutions optimized for an ever-expanding range of applications, with a strong track record of performance in providing simple and reliable connectivity networks for just the application you're creating. B&B Electronics has the experience and technology platform to help you make the right connections.

### Deep Expertise in the Full Spectrum of Energy and Resource Management Industries

B&B Electronics supplies a complete line of connectivity solutions, interface products, and other essential elements for controlling, monitoring and protecting your systems. B&B Electronics' technology is found throughout modern energy generation and distribution systems and resource management facilities:



Coal & Fossil Fuel Plants



Solar Power Generation



Hydro-Electric Power Systems



Wind Power Generation



Nuclear Power Generation



Public Water Systems



Wastewater Treatment



Well Level Monitoring

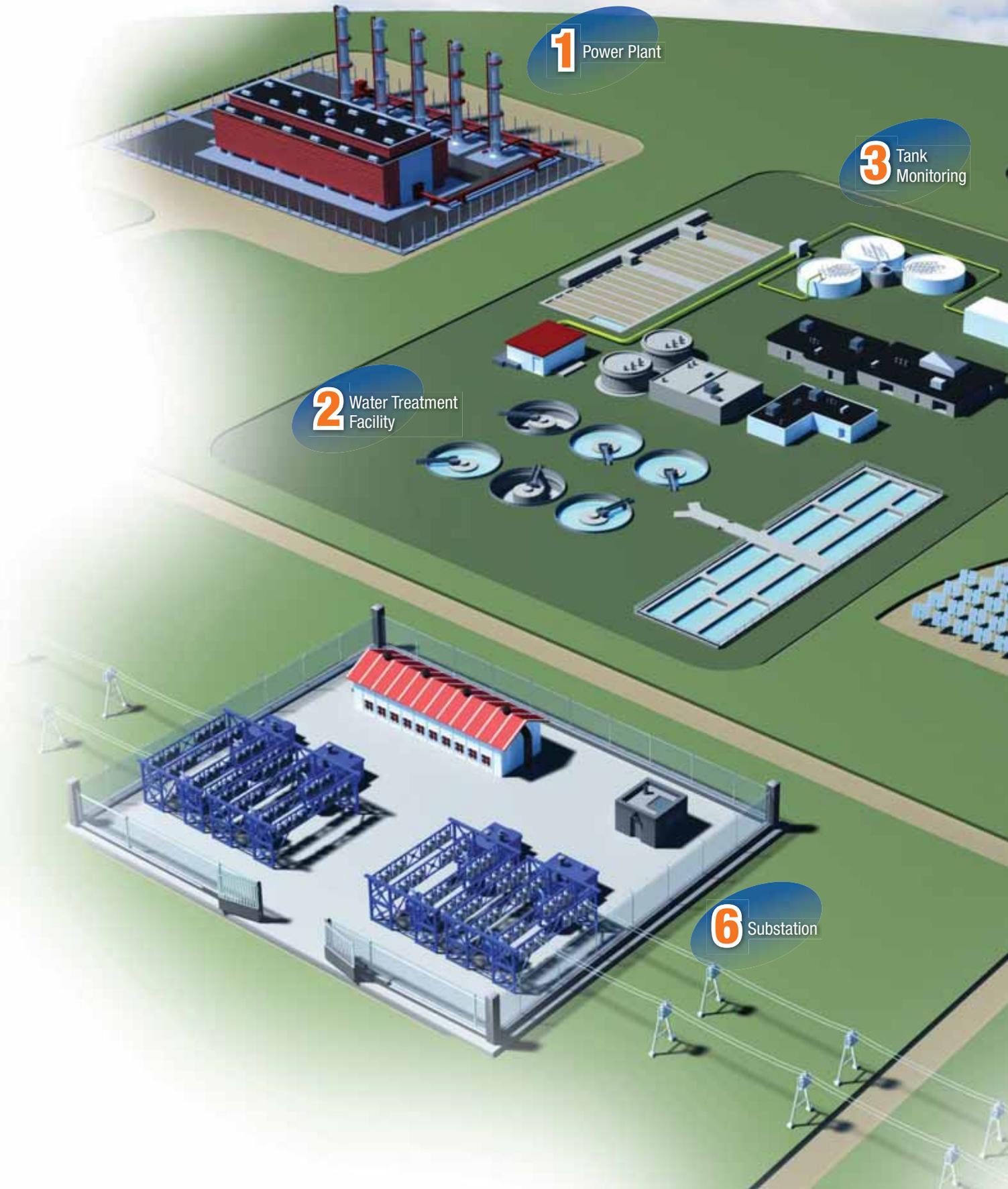


**1** Power Plant

**3** Tank Monitoring

**2** Water Treatment Facility

**6** Substation





**4** Wind Farm

**5** Solar Panel Array

**1** Power Plant



Modbus Ethernet to Serial Gateway  
*MESR901*

**2** Water Treatment Facility



Wireless Ethernet Bridge  
*GhostBridge5*

**3** Tank Monitoring



Radio Modem  
*ZP24D-250RM-SR*

**4** Wind Farm



Industrial Ethernet Switch  
*ESW208-T*

**5** Solar Panel Array



Wireless Modem  
*ER75i v2*

**6** Substation



Industrial Isolated Serial Repeater  
*485OPDRI-PH*



## ***Global Communications Expertise***

Our Technical Support team has field-proven experience in data communication applications, connectivity solutions, network design and product installation. Whether you have a simple application question, a complex project installation, or an outside-the-box problem, B&B Electronics' engineers don't just troubleshoot problems after the fact — they can actually prevent and anticipate system design and integration problems before they begin.

All of our data communications solutions are backed by our comprehensive Quality Assurance program and a limited life-time warranty.

## **The Challenge**

A testing laboratory for a wastewater treatment plant that serves people in the state of Washington is responsible for checking chlorine and pH levels before the treated water is returned to the river at the outfall.

As is true with most wastewater plants, the testing facility is located a significant distance from the plant, leading to data transmission problems. Although the technicians at the lab could enter data into their laptops, they couldn't enter data directly into the main network at the plant because they weren't connected.



# Ethernet Extenders from B&B Electronics Let Test Lab Talk to Wastewater Treatment Plant

## The Solution

B&B Electronics tackled this problem by expanding the wastewater treatment plant's Ethernet network out to the testing facility with a pair of Ethernet extenders and an Ethernet to serial server, which offered a simple, cost-effective data connectivity solution.

Now, technicians in the testing lab can enter values directly into the mainframe system via the extended network connection. The connectivity is bidirectional, so technicians can also access files stored on the treatment plant's mainframe without ever leaving the lab.



## Discover How B&B Electronics Can Simplify Your M2M Communications

With a growing range of robust connectivity platforms for serial, Ethernet, wireless and USB applications and standard-setting technical support capabilities delivered online and on the phone, B&B Electronics can guide you through designing your system and integrating our solutions into your network or product quickly and efficiently. Our Tech Support department is staffed with experts dedicated to helping you re-envision, re-scope, and re-structure your data communication networks. And with more than 40 distributors in 60 different countries, we can ensure fast, comprehensive and local customer service and support.

With thousands of solutions and a manufacturing/support footprint throughout North America and Europe, B&B Electronics delivers the platforms, products and professional insight you need to complete your project quickly, so you can focus on your job, not on your network.

B&B Electronics has earned an extensive list of industry certifications and compliance ratings, extending far beyond core ISO and RoHS compliance to include certifications from UL, CE, NEMA, IEEE, IEC and the European Union's WEEE Directive, among others. B&B Electronics' products are built for long-term performance and you can trust us to provide the right solution for your energy or resource management application. Rugged and reliable, our products are backed by a limited lifetime warranty.

Learn more online or call to see how B&B Electronics can create a solution to connect your devices—whether they're all in one rack or spread across the globe.

Visit our website at [www.bb-elec.com](http://www.bb-elec.com) for access to all our solutions, easy product configurators, tech support diagrams, white papers, and detailed technical data.



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