INDUSTRIAL AUTOMATION
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 industrial, hazardous and demanding environments where monitor and control were previously unreachable. Learn more about these solutions...

New data communication technologies and protocols continue to appear. At the same time, the world's installed base of existing M2M equipment and infrastructure is far too valuable - and far too useful - to discard. So modern industrial networks must be able to network-enable many different kinds of equipment and ensure that each piece is used to its full potential - even when many of the pieces are several technological generations apart.

Whether you're designing an entirely new production system, retrofitting an existing installation or looking for ways to extend the edge of your network, B&B Electronics can provide the right wired or wireless data communications solution. From legacy serial equipment to cellular M2M, we'll help you network-enable just about anything, just anywhere, and we'll see to it that the end result is seamless.

Industrial Automation on the Job

The certainty of change is a constant in modern manufacturing. Process improvement is now embedded in the DNA of today's automation engineers. Bridging legacy systems with the latest advances in process efficiency demands rugged, reliable wired and wireless data connectivity solutions. B&B Electronics has invested more than 30 years and more than 500 man years in engineering an impressive suite of products that support your industrial network infrastructure. Our expertise is your resource. Whether you're designing a new production system, retrofitting an existing installation, or exploring connectivity options at your network's edge, B&B Electronics' engineers can help you envision your new network configuration. Then, you can select and easily implement the right data communication solution. And B&B Electronics' support will be available every step of the way.

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

- **Serial converters, isolators, repeaters, surge protectors, cards**
- **USB converters, isolators, hubs, extenders**
- **Ethernet switches, routers, extenders**
- **Ethernet serial servers, gateways, media converters**
- **Wireless cellular routers, WiFi cellular routers**
- **Wireless radio modems, I/O**
- **Wi-Fi access points, routers, bridges, serial servers, modules**
- **Turnkey and custom 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 installation you're creating. Whether you're building networks that connect to legacy equipment, making data connections out to the edge of your network, embedding connectivity in your OEM product, or anything in between, B&B Electronics has the experience and technology platform to help you make the right connections.

Deep Expertise in Industrial Automation and Control

B&B Electronics supplies a complete line of connectivity solutions, interface products, and other essential elements for industrial automation to control, monitor, and protect your production systems. B&B Electronics' technology is found throughout the plant, connecting critical automation environments.
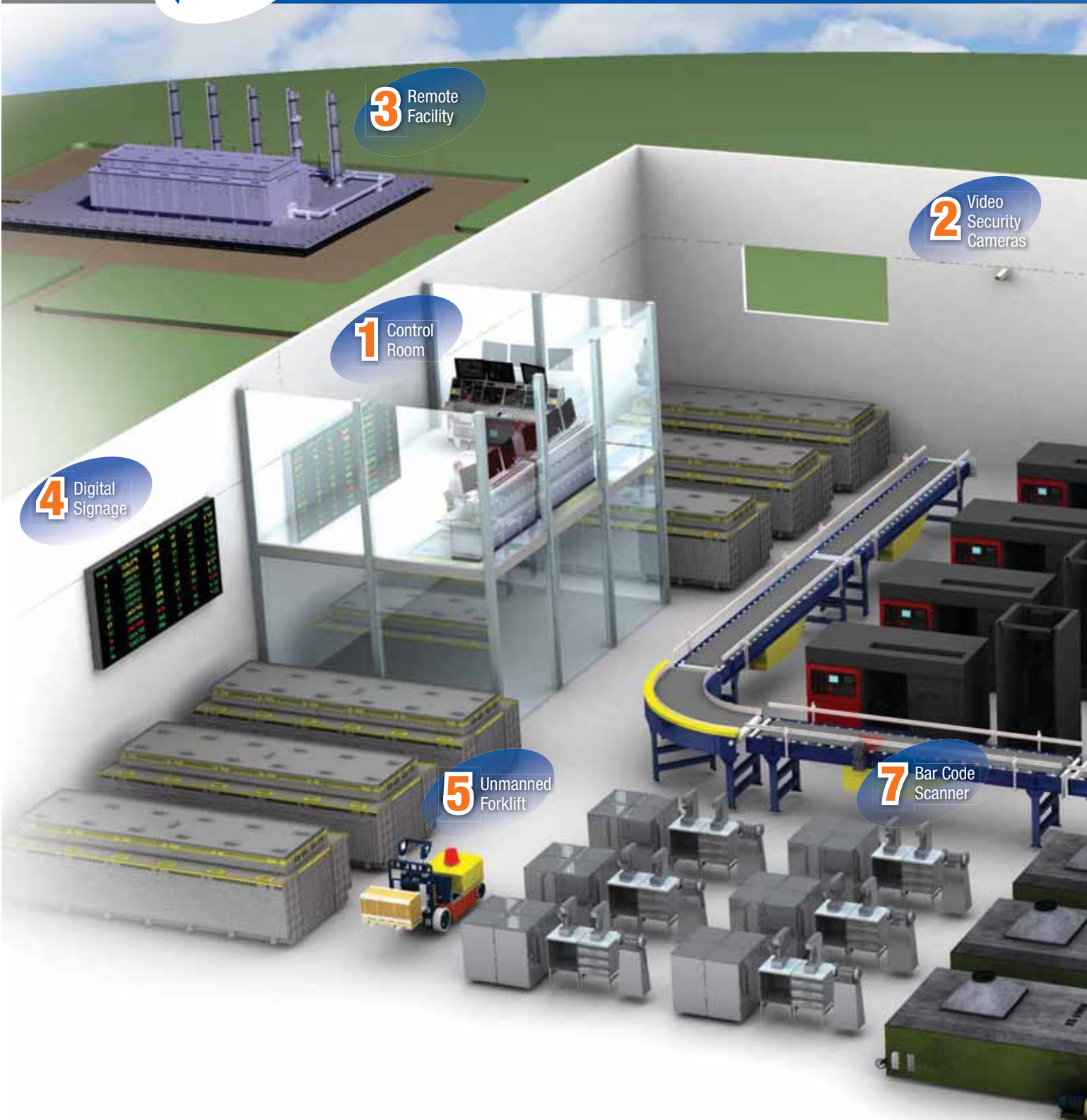
| Process Control | Robotics | Machining Centers | Dispensing | Packaging/Labeling | Warehousing/Distribution |

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3 Remote Facility

2 Video Security Cameras

1 Control Room

4 Digital Signage

5 Unmanned Forklift

7 Bar Code Scanner

B&B ELECTRONICS
Make The Right Connections

1 Control Room

Industrial Serial Converter
485LDRC9

2 Video Security Cameras

3 Remote Facility

Wireless Ethernet Bridge
GhostBridge5

4 Digital Signage

Ethernet Media Converter
EIR-M-SC

5 Unmanned Forklift

Wireless Access Point
APXN-Q5428

6 Machine Control

Modbus Ethernet to Serial Gateway
MESR901

7 Bar Code Scanner

Ethernet Mini Serial Server
VESP211

6 Machine Control

1 Control Room

Efficiency Rising at
By Adding Ethernet

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**

After a major manufacturer of baked goods installed an industrial Ethernet network to accommodate a new packaging line, the facility's process engineer began considering ways to expand the network to optimize the efficiency of its existing ovens and other production equipment.

Unfortunately, the thermometers, level sensors, scales, and conveyor system involved were all designed to communicate via RS-485, not Ethernet. This equipment, which still had many years of productive life ahead, represented a huge capital investment, so simply replacing it was out of the question. That's when the process engineer turned to the experts at B&B Electronics for guidance.

Baked Goods Plant Connections to the Mix

The Solution

Integrating the existing equipment into the new network required adding Ethernet serial servers to connect the RS-485 ports of the production line devices. The manufacturing floor environment required a robust server designed for industrial service. The process of integrating serial devices into the Ethernet network also had to be both simple and seamless, requiring minimum set-up procedures.

B&B Electronics' Model VESR922T serial server satisfied all these requirements, allowing bakery personnel to monitor and control all parts of the production line from the factory control room, and even execute web-based management. Another advantage of these serial servers is their Ethernet pass-through port, which allows daisy-chaining them together without purchasing additional switches.

This economical solution preserved the bakery's legacy equipment investment while increasing plant floor productivity. Furthermore, the modular DIN rail mounting and optional fiber port on the VESR922T allows for easy system expansion and additional upgrades in the future.

Ethernet Serial Server
Vlinx™ VESR922T

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—or just support the network already in place. 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 industrial automation 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* for access to all our solutions, easy product configurators, tech support diagrams, white papers, and detailed technical data.

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www.bb-elec.com

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