

Multi-Platform Solution for Industrial Communications



# Send Bidirectional Control Signals Over Power Conductors

Nexus BB is a brand new data over power solution for industrial applications, and works across many different conductor profiles including: festoon, cable chain, slip ring, conductor rail, and cable reels. Nexus BB creates a secured hardwired connection through any conductor providing ultimate reliability. The secure signal travels through two of the power conductors, eliminating the need for additional signal conductors.

Nexus BB can be used on new and existing systems to add a secure data communication layer, and does not require any networking expertise or special equipment. Nexus BB can eliminate WiFi for mobile equipment communication, with the same minimal maintenance as a WiFi solution. The innovative design adapts to noisy environments for dependable performance. Nexus BB is a plug and play solution that allows for easy modernization to existing installations with minimal downtime. Nexus BB is a data over power solution that provides a contained signal for ultimate security through signal isolation.

- No wireless signals
- Hardwired solution
- Plug & Play
- Minimal maintenance



### **Industrial Virtual Ethernet Cable**

#### Not a Programmer? No Problem!

Nexus BB is easy to install with no programming required and acts as virtual Ethernet cable.

#### **Keep Hackers Out**

WiFi signals are transmitted through the air are open game for the wrong person to mess with your equipment. Nexus BB is designed with a contained signal providing ultimate security to your facility's data communication.

#### **Keep it Simple**

Plug and Play installation means you don't need to be the networking expert in the building. It also means you don't need to worry about sourcing special equipment for your install.



#### **Size Matters**

We know you have a restricted window of space to work with Nexus BB's sleek compact design easily fits into new and existing system enclosures.



#### **Ditch the Channel Conflict**

Wireless signals compete with other channels in your facility, creating noise WiFi cannot overcome. Nexus BB overcomes these wireless challenges with hardwired communication that never competes with other channel devices.

#### Reliability When it Matters the Most

You need system controls and data transmission to be reliable, the safety of your team and equipment depend on it. Nexus BB's hardwired connection provides ultimate reliability. Where WIFI drops out, Nexus BB signal prevails.

#### **Reduce Your Maintenance Time**

Nexus BB is the same minimal maintenance as WiFi, without all of the headaches that come along with a WiFi system integration.

### **Applications & Specifications**

#### **Features & Benefits**

- Secured hardwired connection provides ultimate reliability
- Overcomes wireless challenges in industrial environments
- Plug & Play installation does not require any networking experience or special equipment
- Same minimal maintenance as a WiFi solution
- Contained signal provides ultimate security
- Easy installation

#### **Technical Specs**

Voltage: 24-48 VDC, 150-300 VDC, 120-600 VAC

 Bandwidth: 350 Mbit/s MIMO 175 Mbit/s SISO

• Protocols: PROFINET, Ethernet/IP, TCP/IP, UDP, Video

• Length: 400 m+

• Operating Temperature: -20°C +70°C

• Number of Vehicles: 7

Maximum Speed: 10 m/s

Nexus BB can be integrated into a variety of power systems quickly and easily:



Conductor Bar/Rail



**Festoon Systems** 



Slip Rings



Cable Reels



**Copper Cables** 

## 3R02038.2-US

## www.conductix.com

#### **Conductix-Wampfler**

has just one critical mission:
To provide you with energy and data transmission systems that will keep your operations up and running 24/7/365.

To contact your nearest sales office, please refer to: www.conductix.us

