Solutions – off the shelf industrial connectivity

BB-400 - Pi & Arduino based remote monitoring and control

The smarter way to know what's happening on your production line.

Brainboxes BB-400 can sense, sort and send your machine data to minimise downtime, speed up response time and maximise profits.

Combining industrial hardware connections with the processing power of a Raspberry Pi Compute Module 3+ the BB-400 Industrial Edge Controller gives you the possibilities of open source software in a simple retrofit way, unlocking the potential of your equipment.

Brainboxes proven IO and serial connectivity and a range of network connections allow data to flow to the application of your choice.

The flexibility of PC systems with open source API programming options makes integration and customisation user friendly.

Combining insights from machinery of all types and ages can be done through a preferred programming language, such as C# and Python or visually in Node-RED, circumventing many of the interoperability issues that can hamper integrated automation.

Govia Thameslink Railway Fleet Systems Engineer Darren Fitzgerald designed a system using the BB-400 to monitor vibration sensors. The system records a vibration score every second and uploads this, along with the GPS location of the train, to the Cloud.

Read Case Study

- 8 Digital IO lines
- Works with common 0-30V sensors
- 1 Ethernet port for wider network
- 1 Ethernet port for LAN network
- Extendable Wi-Fi antenna
- Bluetooth - for wireless sensors
- UPS power management - prevents corruption
- Dual redundant 5-30 VDC power supply
- Highly compatible open source software
- Customise with APIs and Docker containers, REST, Websockets, or .NET APIs
- Program in your favourite language or use out-of-the-box applications

Download your free guide: Prototyping on Raspberry Pi