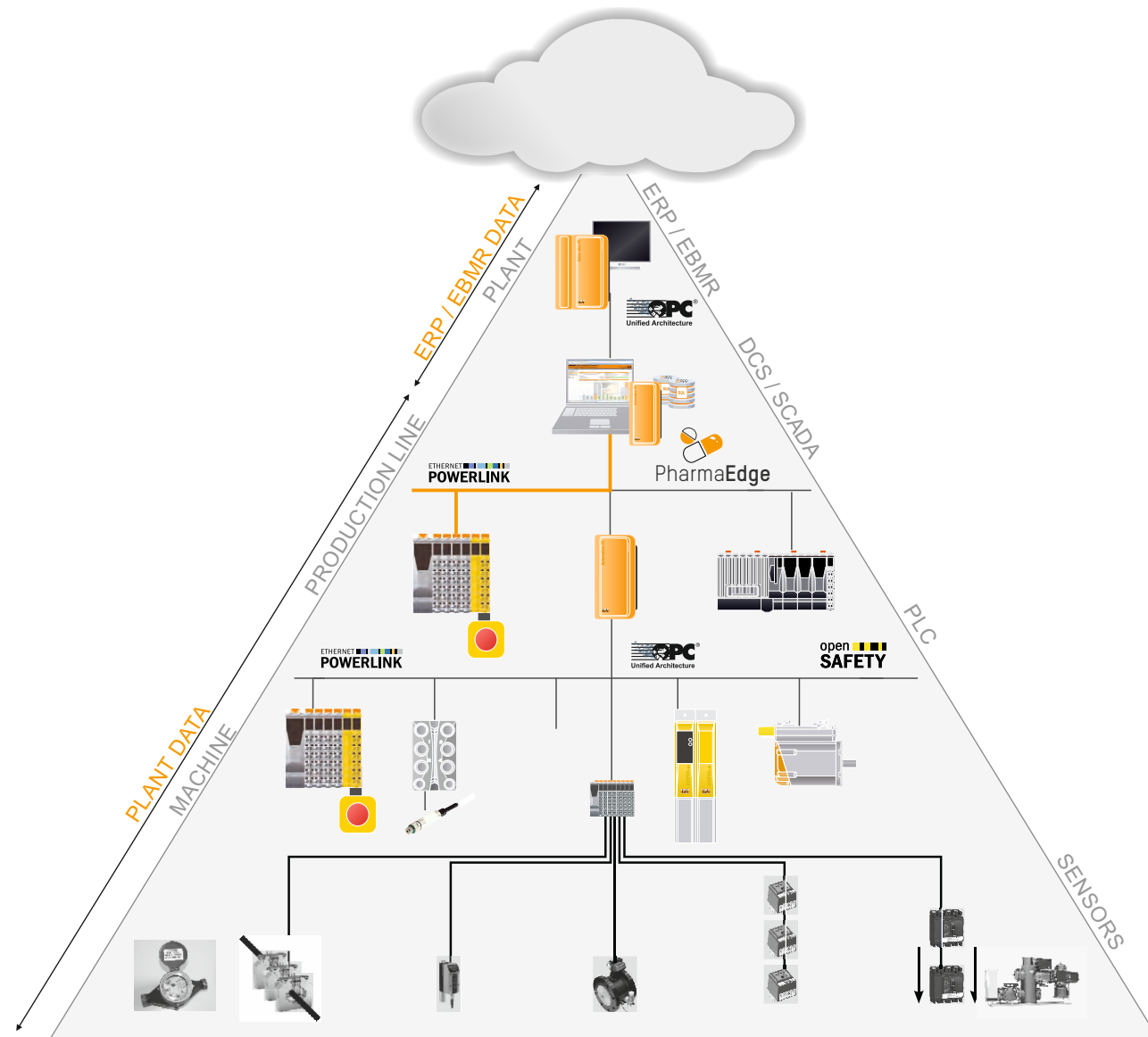# PharmaEdge

Adding an edge to your Pharma facilities

- → Collect and compress data
- → Archive data
- → Analyze data
- → Visualize information
- → Control
- → Security
- → Connectivity
- → Cloud connectivity

Integrated automation
Global presence
Solid partnership

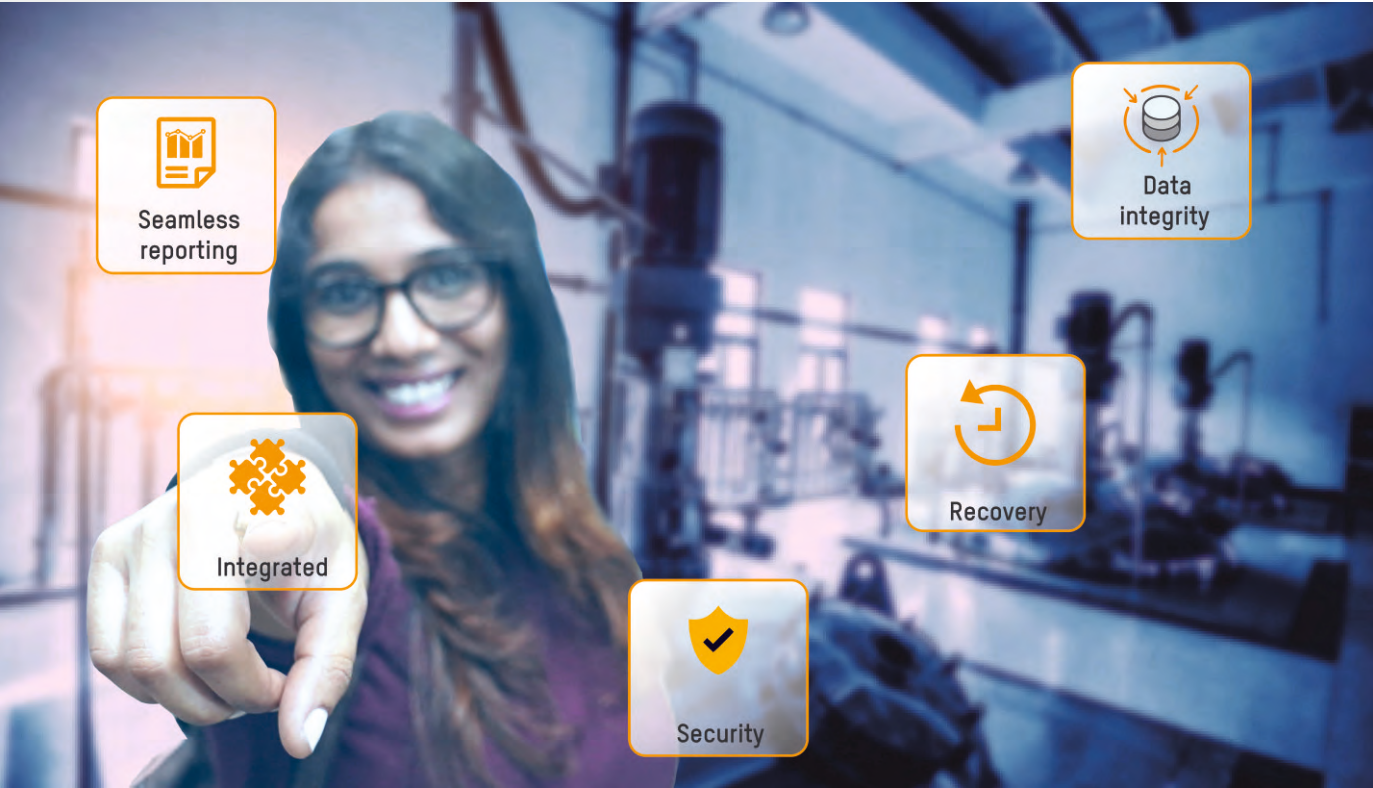OPC UA OVER TSN ETHERNET POWERLINK open SAFETY

PharmaEdge
More than just SCADA

PERFECTION IN AUTOMATION
A MEMBER OF THE ABB GROUP

PharmaEdge is an integrated, out-of-the-box, optimized offering from B&R for pharma industry to meet increasing demand of FDA compliance. It helps to achieve cyber-security and advanced functionality of elaborate reporting, analytics and business intelligence. PharmaEdge offers all benefits of SCADA and a powerful control system in one device. With possibilities to add energy monitoring, condition based predictive maintenance and MES / ERP connectivity, it enables implementation of smart and futuristic machines.

PharmaEdge
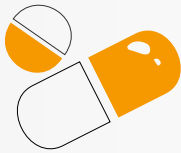## SCADA++ | Future ready

Demands and challenges of Pharmaceutical industry

Quality, compliances to various standards and norms, safety, ease of track and trace, availability of data and futuristic manufacturing are the trademarks of a world class pharmaceutical facility. In order to fulfil these requirements, many pharma companies look at the age-old SCADA solution. However, with demands of a futuristic facility on the rise, only data acquisition does not suffice, and factories demand faster & accurate system with possibilities of energy monitoring, condition-based maintenance, predictive maintenance, MES / ERP connectivity, reporting and advanced analytics. Today, it is the need of the hour for companies to have a one stop solution and an integrated approach to not only the existing possibilities but also becoming ready for the future.
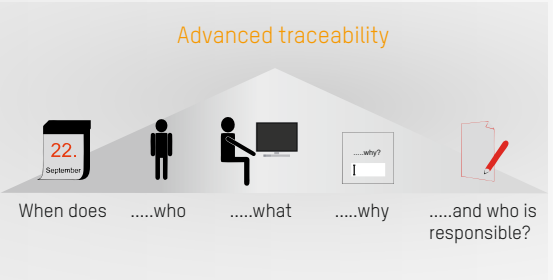
SCADA++: More than just SCADA

➔ Easy HMI design for visualization & operation
➔ Embedded tamper-proof database
➔ Sophisticated trend system & efficient alarm management
➔ Combined display of data, alarms and events to trace cause and effect
➔ Recipe function & integrated reports
➔ Single device for control and operations

Advanced traceability

When does .....who .....what .....why .....and who is responsible?
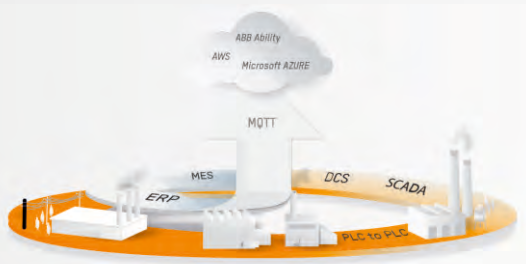
Compliance with 21 CFR part 11

➔ Access protection
➔ Audit trail and change management
➔ Central user management
➔ Data archiving and retrieval
➔ Electronic signature
➔ Batch reporting

Security & Transparency

➔ Specially hardened operating system
➔ LDAP authentication
➔ SSL/TLS encryption
➔ Trusted platform module 2.0
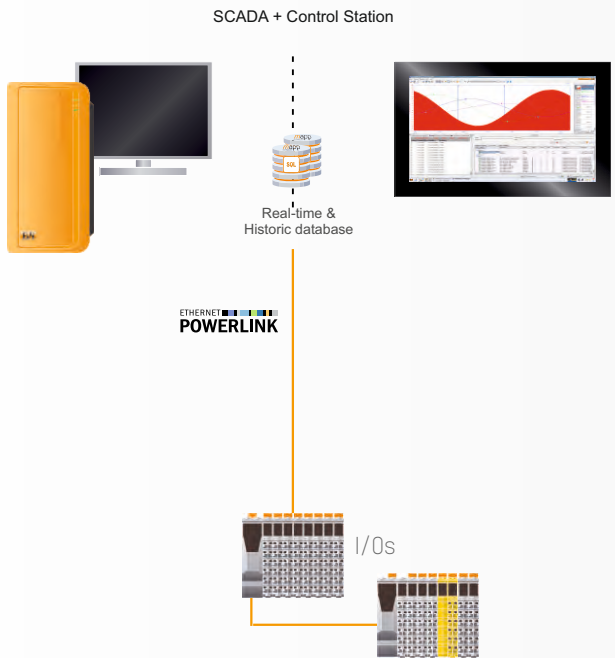➔ Version management
➔ Secure communications

Industry 4.0 ready

➔ All commonly used fieldbus systems supported
➔ OPC UA connectivity
➔ Seamless connectivity to MES/ERP/EBMR
➔ Easy cloud connection via MQTT
➔ Integrated business intelligence for reporting & dashboards
➔ Standardized connectivity to external database
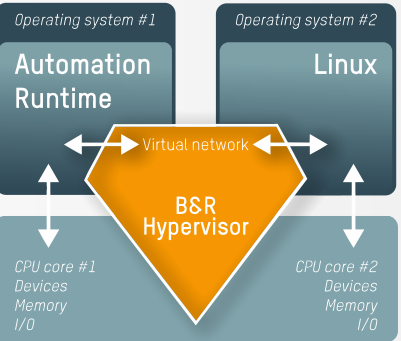
Operational excellence - Added benefits

➔ Control performance monitoring
➔ Line monitoring boosts output
➔ Energy monitoring which supports implementation of ISO 50001
➔ Suitable for all energy types and consumers
➔ Predictive maintenance by condition monitoring
➔ Increased mean time between maintenance with reduced downtime

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Integrated Architecture

This is a one box solution where users will be able to monitor as well as control their entire process.

This integrated solution contains B&R Industrial PC with Linux operating system, Runtime, operator and I/O licenses. In addition, it also contains hypervisor along with process automation and basic automation libraries for easy configuration.

SCADA + Control Station

Real-time & Historic database

ETHERNET POWERLINK

I/Os

Reports & Dashboards

➔ User-friendly reports - create, format and distribute
➔ Compatible with standard browser or mobile devices
➔ Apps for iOS and Android allowing access to dashboards and reports
➔ Security with server-side authentication for mobile devices
➔ Optional business intelligence tool

Features & benefits

➔ No limitation on internal tags
➔ Simplified commissioning
➔ Reliable redundancy at every level
➔ Maintenance-free and redundant database for historical data
➔ Modular hot pluggable I/O system
➔ Web based diagnostics with System Diagnostics Manager (SDM)

Highlights

➔ From basic monitoring to FDA compliant automation
➔ Limitless scalability
➔ Subscription model for security updates
➔ Long product life-cycle
➔ No frequent updates & upgrades
➔ Single device for control and visualization
➔ Integrated, secure & cost-optimized solution

ETHERNET POWERLINK

OPC Unified Architecture