

White Paper

Total Automated Solutions for Industrial Telemetry

Empowering Industry 4.0 with Seamless Data Acquisition and Managements

Summary

In today's rapidly evolving industrial landscape, the demand for efficient data acquisition and management solutions has never been higher. As industries embrace digital transformation, the need for real-time insights, predictive maintenance, and optimised operations has become paramount. Total Automated Solutions is committed to addressing these challenges head-on through our cutting-edge industrial telemetry offerings. This white paper elucidates how our Telemetry Solutions can support your operations, enhance productivity, and drive sustainable growth for our valued customers.

Introduction

Total Automated Solutions is at the forefront of innovation, delivering state-of-the-art industrial telemetry solutions tailored to meet the diverse needs of modern industries. Our integrated approach combines robust data acquisition systems to provide real-time visibility into critical operational parameters. By leveraging Telemetry Solutions clients can achieve efficiency, reliability, and performance optimisation across their operations.

Challenges in Telemetry

Traditional telemetry systems often face numerous challenges that hinder their effectiveness in meeting the demands of Industry 4.0:

Legacy Systems: Outdated telemetry systems lack scalability, interoperability, and the ability to handle the vast volumes of data generated in modern industrial environments.

Data Silos: Disparate data sources and siloed information impede comprehensive insights, leading to inefficiencies and missed opportunities for optimisation.

Manual Processes: Manual data collection and analysis are time-consuming, error-prone, and incapable of providing real-time insights necessary for proactive decision-making.

Security Concerns: With the proliferation of cyber threats, ensuring the integrity, confidentiality, and availability of telemetry data is critical for safeguarding industrial assets and operations.

Total Automated Solutions: Industrial Telemetry

We offer a holistic approach to telemetry, addressing the aforementioned challenges and unlocking new possibilities for operational excellence:

Robust Data Acquisition Systems

Our telemetry solutions are built on robust data acquisition systems that seamlessly collect, process, and transmit data from sensors to centralised platforms. Leveraging industry-standard communication protocols, TAS ensures compatibility and interoperability with existing infrastructure.

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Telemetry Systems Approach

Total Automated Solutions run a bespoke telemetry system to enable rapid deployment of field devices called Remote Terminal Unit's (RTU). The remote monitoring provides a powerful yet cost-effective and scalable solution through data acquisition. This telemetry system equipment can be connected in a multitude of different ways and powered from almost any source, including low power solar solutions. We have a best-of-breed approach using most suitable highest quality RTU's, telemetry medium and centralised control/monitoring, with telemetry networks that fit with your existing/legacy systems.

Benefits to Customers

By partnering with Total Automated Solutions, customers can realise a multitude of benefits:

Enhanced Operational Efficiency: Our telemetry solutions enable real-time monitoring, predictive maintenance, and proactive decision-making, leading to enhanced operational efficiency and reduced downtime.

Cost Savings: By optimising resource utilisation, minimising maintenance costs, and preventing unplanned downtime, we help our customers achieve significant cost savings and maximise return on investment.

Improved Safety and Compliance: Our telemetry solutions facilitate compliance with regulatory requirements and industry standards, ensuring the safety of personnel, assets, and the environment.

Scalability and Flexibility: TAS's modular and scalable architecture allows for seamless integration with existing infrastructure and future expansion, providing customers with the flexibility to adapt to evolving business needs.

Competitive Advantage: By leveraging Total Automated Solutions telemetry capabilities, customers can gain a competitive edge in the market through improved productivity, reliability, and innovation.

Conclusion

Total Automated Solutions is committed to empowering industries with cutting-edge telemetry solutions that drive operational excellence, sustainability, and growth. By harnessing the power of advanced sensor technology, robust data acquisition systems, cloud-based analytics, and end-to-end security, we enable our customers to unlock new possibilities for efficiency, reliability, and performance optimisation. Together, we can embark on a journey towards a smarter, more connected future for industrial operations.

For more information about Total Automated Solutions and our industrial telemetry offerings, please visit www.tasweb.uk or contact us directly at +44 (0) 1423 35 98 88.

Total Automated Solutions: Powering the Future of Industrial Telemetry.

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References

The value of a telemetry monitoring system in sustaining the operational performance of industrial information systems, August 2020 South African Journal of Industrial Engineering 31(2), DOI:10.7166/31-2-2200 License CC BY 4.0 Authors: Jaco Prinsloo, Marc James Mathews; What's the Value of Industrial Telemetry Data? Joel Norris, VP of Sales (Head of Sales) | Private Equity, December 19, 2023 A telemetry-driven approach to simulate data-intensive manufacturing processes: Gianfranco E. Modonia,, Marco Saccob, Walter Terkajb a ITIA-CNR, Institute of Industrial Technologies and Automation, National Research Council, Bari, Italy b ITIA-CNR, Institute of Industrial Technologies and Automation, National Research Council, Milano, Italy, 2016 Science Direct open license