**Wireless Monitoring** *EVOLVED*

TDA<sub>C</sub>

# Revolutionising Wireless Monitoring with Unparalleled Flexibility and Insights

In today's interconnected world, where efficiency and safety are paramount, TDAC Pro emerges as a game-changer. We empower businesses across a spectrum of industries to harness the power of their data with cutting-edge wireless monitoring solutions.

Our holistic approach seamlessly integrates telemetry, control, and analytics, optimising the entire data journey from capture to insightful analysis. This comprehensive solution provides real-time insights, enabling proactive decision-making and driving operational excellence.

Whether you're looking to optimise performance, enhance safety protocols, or gain a deeper understanding of your operational dynamics, TDAC Pro delivers the tools and insights you need to excel.

**TDAC**

# Adaptable Solutions for Diverse Industries

TDAC Pro understands that one size doesn't fit all. That's why we offer a range of tailored solutions designed to meet the unique demands of diverse industries. Whether you're aiming to optimise aircraft performance in aerospace, enhance crop yields in agriculture, boost vehicle safety in automotive, safeguard critical infrastructure in civil engineering, maximise energy production in the energy sector, streamline manufacturing processes, or enhance safety and efficiency in mining,

TDAC Pro empowers you with the precise data and insights you need to achieve your objectives. Our adaptable solutions seamlessly integrate into your existing workflows, providing real-time monitoring, analysis, and control to drive efficiency, innovation, and sustainability across your operations.

# Cutting-Edge Technology for Data-Driven Insights

**Effortless Integration:** TDAC Pro seamlessly integrates with your existing infrastructure, including load cells, strain gauges, and other sensors, ensuring a smooth transition and minimal disruption.
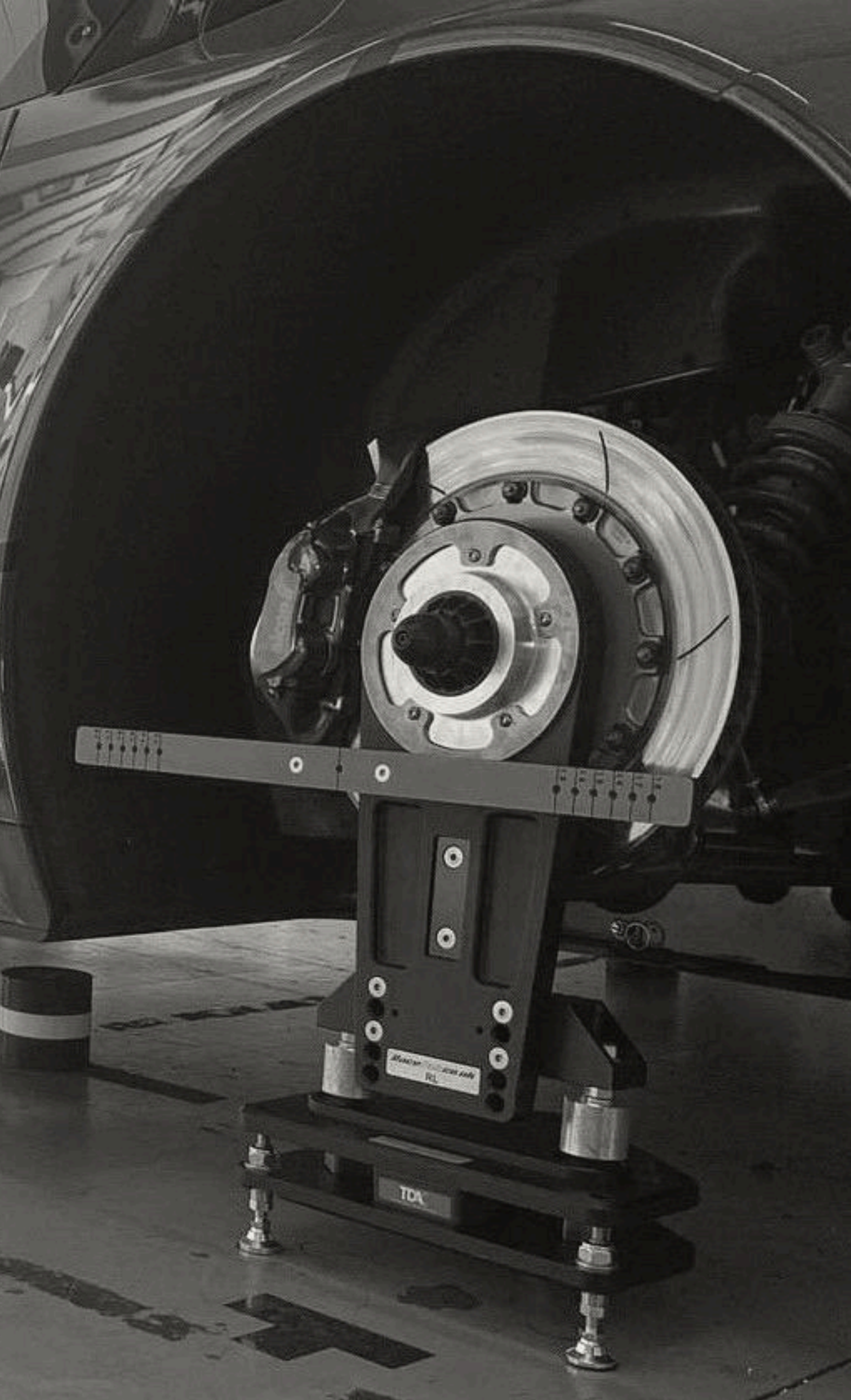
**Secure and Reliable Cloud Platform:** Access your data anytime, anywhere with our secure and reliable cloud storage, eliminating the limitations of on-site servers and providing peace of mind.

**Intuitive User Interface:** Our user-friendly software simplifies data configuration, monitoring, and analysis, empowering your entire team to engage with data and extract valuable insights.

**Unmatched Flexibility:** TDAC Pro adapts to your unique requirements, scaling effortlessly to accommodate various deployments, from small-scale setups to large, complex operations.

**Unwavering Accuracy and Reliability:** Engineered to deliver precise and reliable measurements, ensuring the integrity of your insights and informing critical decision-making processes.

**TDAC**

# TDAC Node: Advanced Bluetooth Low Energy Transmitter

The TDAC Node is a Bluetooth Low Energy (BLE) strain bridge transmitter module designed to provide high-quality measurements accessible via mobile platforms such as phones or tablets.

The module leverages BLE technology, combining the flexibility and widespread availability of Bluetooth receivers with the low power consumption essential for embedded systems.
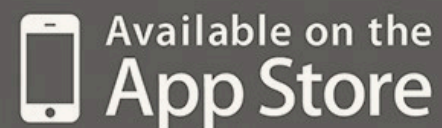
The TDAC Node operates on two complementary BLE principles: broadcast advertising data, allowing the same data to be delivered to multiple receivers simultaneously, and low-power paired connections for efficient point-to-point communication.

One to One

Many to One

One to Many

Many to Many

**Bluetooth**

# TDAC App: Unlock the Power of Your Data

TDAC Pro's innovative app empowers businesses to harness the full potential of their data. Seamlessly control your TDAC Node and gain actionable insights with this intuitive platform. Monitor critical parameters in real time, configure settings remotely, and analyse historical trends with ease. Customisable dashboards and data visualisation tools ensure you have the information you need, when you need it.

Improve operational efficiency, enhance safety protocols, and make data-driven decisions with confidence. The TDAC app provides the tools to optimise processes, prevent potential hazards, and drive productivity across a range of industries. Download the TDAC app today and experience the future of wireless monitoring, available for iOS and Android.

Available on the App Store

ANDROID APP ON Google Play

# Technical Specification

**Strain Gauge Excitation:** 4-wire system with a nominal voltage of 3 Vdc.

**Strain Gauge Compatibility:** Supports a wide range of strain gauges with drive capabilities from 85 to 5000 ohms and sensitivities up to ±48 mV/V.

**High-Resolution Measurements:** 24-bit internal resolution, providing noise-free resolution up to 17.5 bits depending on the sensor and sampling rate.

**Temperature Stability:** Exhibits excellent offset and gain temperature stability for accurate and reliable performance in varying environments.

**Power Management:** Flexible power options, including rechargeable battery, mains power, and solar power, with a USB charging port.

**Connectivity:** Bluetooth Low Energy (BLE) for wireless communication, with mesh networking capabilities to extend the range beyond the standard 90-100m.

**Data Handling:** On-board data logger for continuous monitoring and storage.

**Scalability:** Proven capacity to work with up to 100 scales.

**Customisable App:** Fully brandable app for iOS and Android devices, enabling users to create dashboards, visualise data, and configure the TDAC Node.

**Cloud Integration:** Secure cloud-based storage with a monthly subscription for remote data access and analysis.
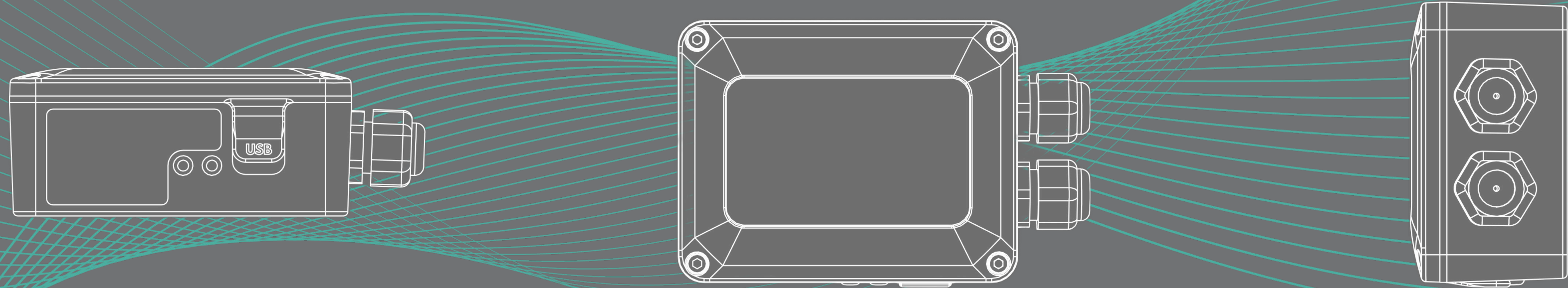
**Advanced Protection:** Configuration PIN, View PIN, and Calibration PIN to prevent unwanted changes and ensure data integrity.

**Environmental Robustness:** Operating temperature range from -40 to +85°C, with IP67 protection for the housed version

**Additional Onboard Sensors:** Temperature, air pressure, air quality, light, audio, 9 axis accelerometer, and anemometer.

**TDAC**

# Technical Data



**Part Number:** TDACNODE **Sensor:** SPECIFIED **Width:** 100 (mm)/4" **Height:** 50 (mm)/2" **Depth:** 60 (mm)/2.23/64" **Weight:** 120 (g)

MADE IN BRITAIN · FCC · CE · UKCA

TDAC

# Connect with TDAC Pro

**Ready to revolutionise your data collection and analysis?**

Get in touch to learn more about how TDAC Pro can help your business thrive.

**Email:** info@tdac.pro

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**Phone:** +44 (0) 7517 896 596

**About TDAC Pro**

TDAC Pro is a leading provider of cutting-edge wireless monitoring solutions. Our flagship product, the TDAC Node, is a multi-sensory telemetry node designed to optimise the entire data journey. We are committed to delivering reliable and accurate data that empowers businesses across a wide range of industries to improve efficiency, enhance safety, and drive informed decision-making.