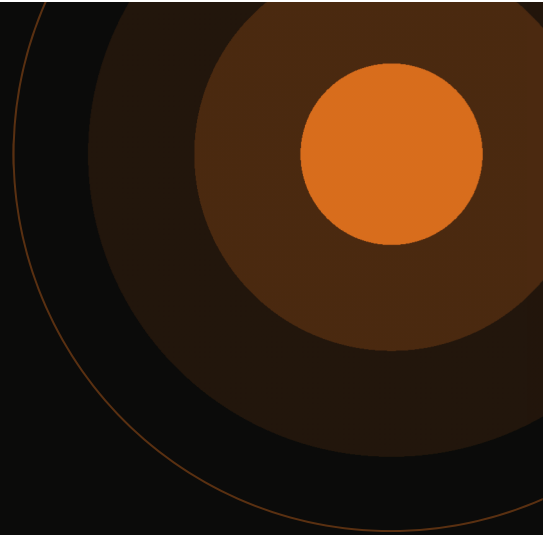




PRODUCT BROCHURE

Built to work together. Designed to stand alone.

Five product families — Sensing, Motion, Connectivity, Vision & Inspection, and Software — each independently deployable and deeply integrated when combined as a complete platform.

01 / SENSING

Sensing Family

Precision industrial measurement. The MTX Sense family covers the primary physical parameters monitored in industrial operations — vibration, pressure, temperature, flow, and level — each instrument designed for industrial environments with appropriate ingress protection ratings, industrial-grade communication interfaces, and extended calibration intervals.

MTX SenseV™

High-frequency vibration analysis instrument for rotating machinery, drivetrains, and structural assets. Multi-axis measurement with on-board FFT processing and configurable alarm outputs. Supports IEPE, digital, and industrial protocol outputs.

MTX SenseP™

Precision differential and absolute pressure sensor for steam, hydraulic, process gas, and liquid process systems. High accuracy, high-speed sampling, and long-term zero stability for demanding measurement applications.

MTX SenseT™

Industrial temperature monitoring for bearings, windings, process equipment, and environmental applications. Thermocouple and RTD input types. DIN rail and field-mount configurations with industrial digital output.

MTX SenseF™

Industrial flow measurement for liquid and gas process streams. Volumetric and mass flow measurement. Suitable for process monitoring, energy metering, and leak detection applications.

MTX SenseL™

Level monitoring for tanks, vessels, reservoirs, and open channels. Non-contact and contact measurement technologies for process and environmental monitoring applications.

02 / MOTION

Motion Family

Precision control, actuation and robotics. From electro-hydraulic drives for heavy-duty applications to precision servo control and robot coordination for high-accuracy manufacturing. SmartHydraulics™ adaptive control technology is embedded across the family, continuously optimizing performance through the product lifecycle.

MTX DriveEH™

Intelligent electro-hydraulic drive for industrial actuation applications including wellhead control, hydraulic presses, valve automation, and heavy machinery positioning. SmartHydraulics™ algorithms compensate for seal wear, fluid viscosity variation, and load changes to maintain positioning accuracy.

MTX MotionCore™

Precision servo motion controller for CNC, cutting, assembly, and positioning applications. High-speed motion profile execution, multi-axis coordination, and position feedback integration for manufacturing accuracy requirements.

MTX RoboCore™

Industrial robot controller and automation integration platform for manufacturing environments. Provides multi-axis motion coordination, robot path planning, and integration with machine vision for guided robotic operations. Supports robotic handling, palletizing, welding, and assembly applications with connectivity to Motiontrons sensing and analytics platforms.

MTX ServoDrive™

FUTURE

High-performance servo drive for precision manufacturing applications requiring high dynamic response and position accuracy. Integrated motor feedback processing and safety input monitoring.

MTX LinearDrive™

FUTURE

Linear servo drive for precision linear positioning applications. Direct drive and lead-screw drive configurations with high-resolution position feedback.

03 / CONNECTIVITY

Connectivity Family

OT/IT integration without disruption. The MTX Connectivity family provides the data infrastructure layer of the Motiontrons platform — moving data from instrumentation to edge processing, and from edge processing to analytics applications, without requiring replacement of existing infrastructure.

MTX Edge™

Industrial edge gateway with local AI inference capability. Executes anomaly detection, signal processing, and protocol translation locally, maintaining operational intelligence independent of WAN connectivity. DIN rail mount with industrial temperature rating.

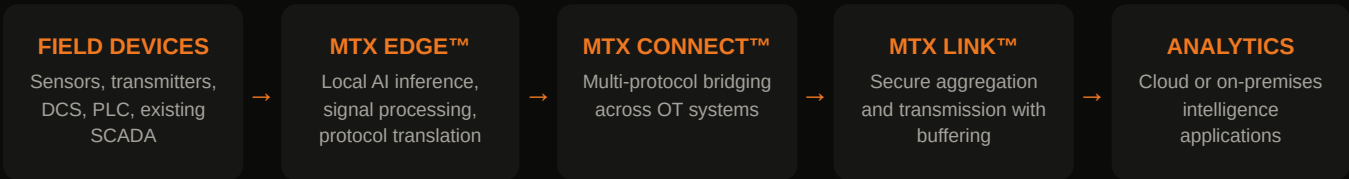
MTX Connect™

Multi-protocol industrial gateway and protocol bridge. Supports OPC-UA, Modbus RTU/TCP, PROFINET, DNP3, IEC 61850, HART, IO-Link, and additional industrial protocols. Enables integration with DCS, SCADA, PLC, and historian systems.

MTX Link™

Secure data aggregation and site communications gateway. Aggregates data streams from multiple field devices and edge gateways, managing secure transmission to cloud or on-premises analytics platforms with configurable buffering and retry logic for unreliable connectivity environments.

HOW DATA MOVES



EdgeConnect™ protocol technology supports a wide range of industrial protocols, enabling integration with the full landscape of industrial control systems — the existing investment stays in place, the intelligence layer goes on top.

04 / VISION & INSPECTION

Vision & Inspection Family

Automated inspection and intelligent perception. Machine vision, 3D sensing, and inline inspection systems for manufacturing, metals, and process industries — combining imaging, structured light, and vision AI to deliver inspection and measurement capabilities at production speeds.

MTX VisionPick™

3D vision-guided robotic bin picking for manufacturing automation. Uses structured-light 3D sensing to identify, locate, and estimate the pose of parts — randomly placed or stacked in bins — enabling robotic pick-path planning and part handling without manual loading. Designed for industrial components across a range of part geometries and bin sizes.

MTX VisionInspect™

Vision-based inline quality inspection for manufactured components and assemblies. Performs dimensional verification, surface quality assessment, and defect detection — including measurement of holes, edges, surfaces, and critical geometric features — at production speeds. Integrates with MTX Insight™ for structured quality records and production traceability.

MTX SteelSight™

Non-contact dimensional measurement and surface defect inspection for hot steel production. Applies 3D laser profiling and 2D imaging to measure dimensional parameters and detect surface defects — including cracks, scabs, and surface damage — on sections, bars, and plate. Engineered for the thermal and mechanical demands of steel hot-rolling environments.

MTX TyreInspect™

Inline tyre profile measurement, dimensional inspection, and surface quality assessment for tyre production lines. Supports continuous measurement of tyre profiles and rubber compound cross-sections — including bead geometry and compound dimensions — with automated surface defect detection. Records inspection results per production unit for traceability and quality management.

05 / SOFTWARE

Software Family

Intelligence at the operational layer. Each application is purpose-built for industrial operations, not adapted from general business software — and all integrate natively with the hardware and connectivity layers of the Motiontrons platform.

MTX Twin™

Digital twin management platform powered by TwinSync™. Creates and maintains real-time virtual representations of industrial assets, continuously synchronized via streaming sensor data. Supports remote monitoring, historical replay, maintenance simulation, and 3D model integration.

MTX Predict™

Predictive maintenance and failure detection application built on PredictIQ™ AI engine. Multi-variate anomaly detection across connected assets, remaining useful life estimation, and maintenance recommendation. Advance-warning prediction with site-adaptive model training.

MTX Insight™

Unified operational intelligence dashboard for all connected assets, sites, and systems. Real-time KPIs, configurable alert management, trend analytics, shift reporting, and maintenance scheduling integration. Mobile-responsive interface for operations across desktop and field devices.

MTX Asset™

Asset lifecycle management and maintenance planning application. Maintains complete asset records, integrates condition monitoring data with maintenance history, supports work order management, and provides the evidence base for capital maintenance planning and regulatory compliance.

GET SPECIFICATIONS

Need technical specifications or integration details?

The Motiontrons engineering team can provide detailed product specifications, integration guides, and protocol compatibility information for your specific infrastructure and application requirements.

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