mks

Automation & Control Solutions

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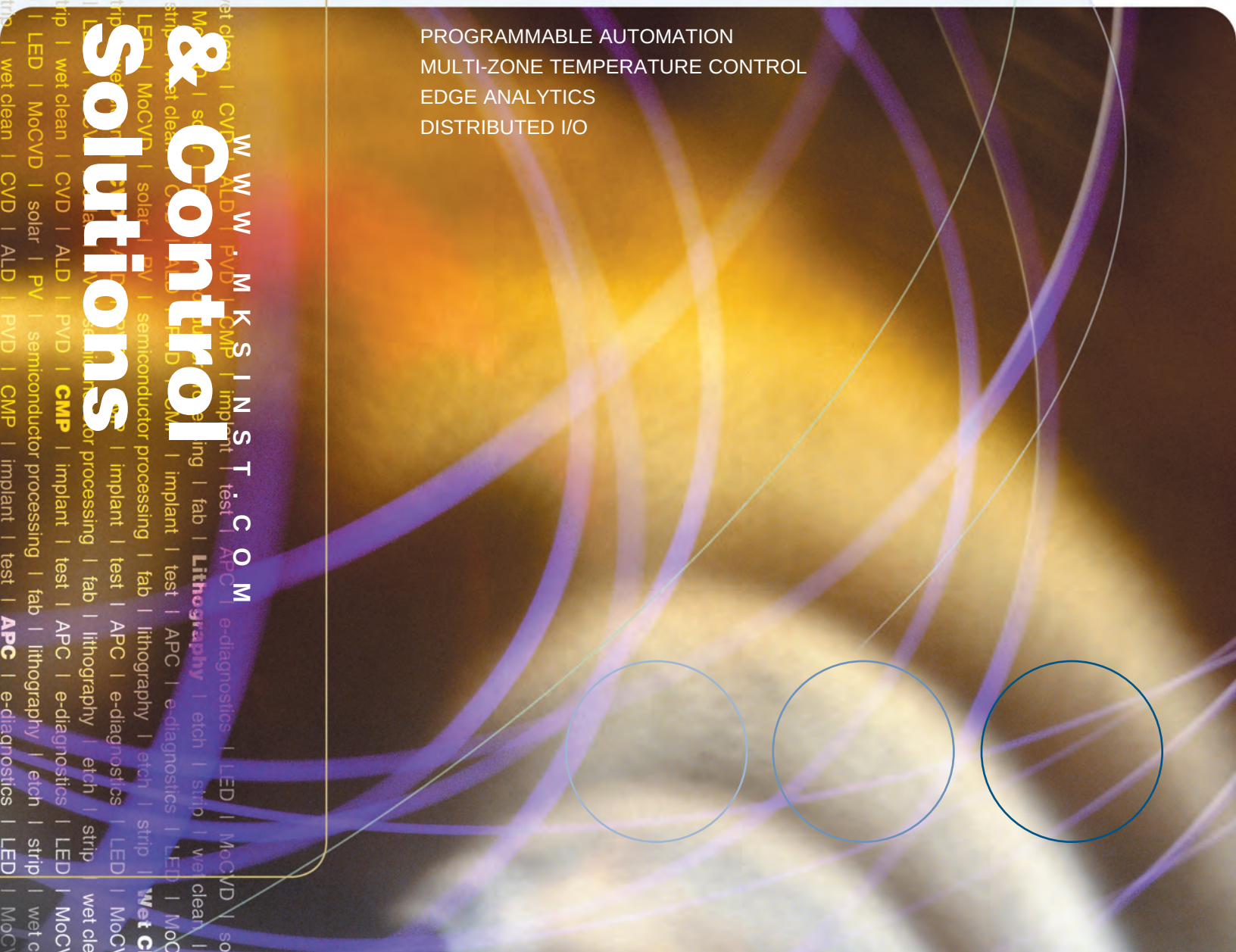
Enabling

Advanced **Control** Solutions

PROGRAMMABLE AUTOMATION
MULTI-ZONE TEMPERATURE CONTROL
EDGE ANALYTICS
DISTRIBUTED I/O



Automation & Control Solutions

Programmable Automation Solutions — The MKS Automation Platform is a modular, scalable total automation and control solution that optimizes efficiencies by speeding implementation and improving time to market. This platform meets the demands of any automation application and seamlessly integrates with other MKS products, providing a low total cost of ownership, along with improved utilization of existing tools and assets.

The platform consists of two programmable automation control options (MKS PAC 100 & PAC 1000); Communication & Coupler Modules (CMs), a variety of I/O modules interfacing to any type of sensor, actuator, valve, etc.; the MKS Controls Workbench software (CWB) for configuration, process monitoring, tuning, data storage and supports a standard IEC 61131-3 programming interface.

Temperature Controls — MultiTherm™ temperature controllers provide all the necessary means for highly uniform temperature control across multiple zones and excellent uniformity of heat distribution across combined area while preserving system costs and real estate. MultiTherm temperature controllers can be seamlessly interfaced to a control system via standard fieldbus protocols, and can also function as a stand-alone controller, with the ability to interface with the MKS Controls Workbench application or LabView.

The MultiTherm™ 2000 Controller can be used as a standalone temperature controller and is easily integrated with a PLC or control system, supporting standard fieldbus and control networks, such as EtherCAT® or Modbus TCP/IP. Additionally, the MKS Controls Workbench (CWB) software application is provided with the MultiTherm 2000.

Edge Analytics — MKS Automation and Control Products leverage advanced data analytics; improved process tuning, optimization, monitoring, troubleshooting and fault detection. The Automation Platform can be configured to support the MKS SenseLink™ QM application, for real-time Multivariate Analytics for prediction and containment of process defects. The platform also leverages experience in DoE through MODDE software and process optimization and applies it to controls and automation.

Advanced control algorithms, supporting both MKS algorithms and third party algorithms including Model Based Control (MBC) significantly improves temperature control compared to common PID control.

Controls Workbench (CWB) is a central, powerful interface solution for device configuration, monitoring, and control along with the ability to view, data log, chart and export process data, perform manual process control, troubleshooting, and advanced tuning of MKS controllers.

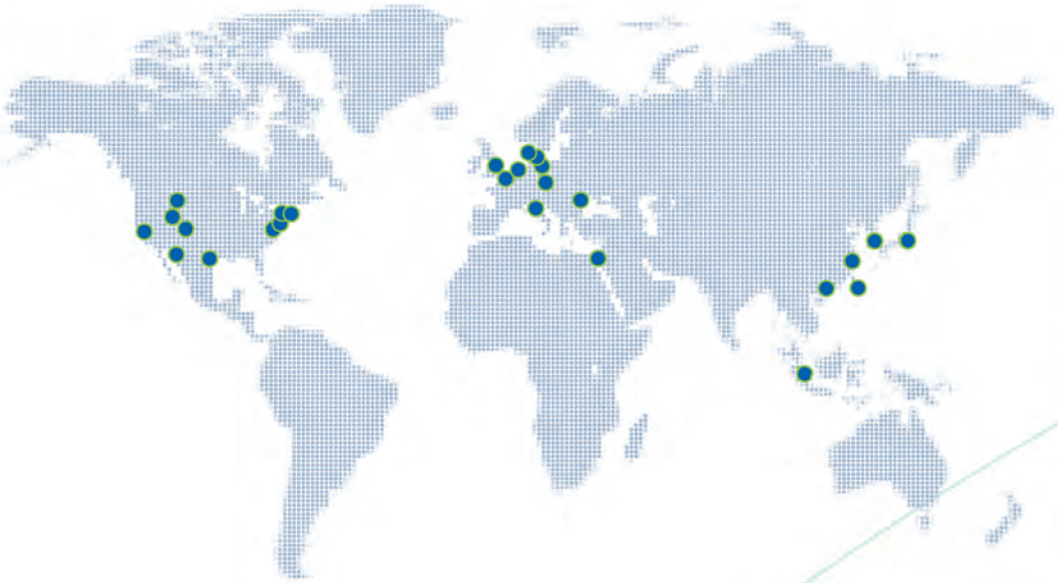
Distributed I/O and Gateways — MKS' high resolution, high accuracy analog and digital I/O for EtherCAT, Ethernet, DeviceNet™ and Profibus® networks provide a flexible environment to build the controller with the exact specifications you require.

Via the MKS Automation Platform, MKS provides a configurable distributed I/O solution to meet the needs for any remote I/O application. The Communications & Coupler Modules (CM) provide support for a variety of fieldbuses and control networks (eg: EtherCAT, Modbus TCP/IP, etc.) and with a broad range of I/O modules available through the MKS Automation Platform, a distributed I/O solution can be configured for both small and large I/O count distributed nodes.

The MacroNode™ and MicroNode™ I/O provides high density, compact and economical I/O solution for popular DeviceNet, Profibus and Ethernet-based fieldbus networks. They are available in a variety of CompactPCI and VME models with a mix of digital I/O, interlocks, and analog inputs/outputs.

The ToolLink™ family of compact gateways connect RS232-based equipment directly to a DeviceNet industrial network and offers streamlined functionality to simplify out-of-box configuration and run-time operation in DeviceNet applications. The serial interface is buffered for full-duplex operation, supporting user-selectable data rates, parity, and hardware or software flow control.

Global Locations



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