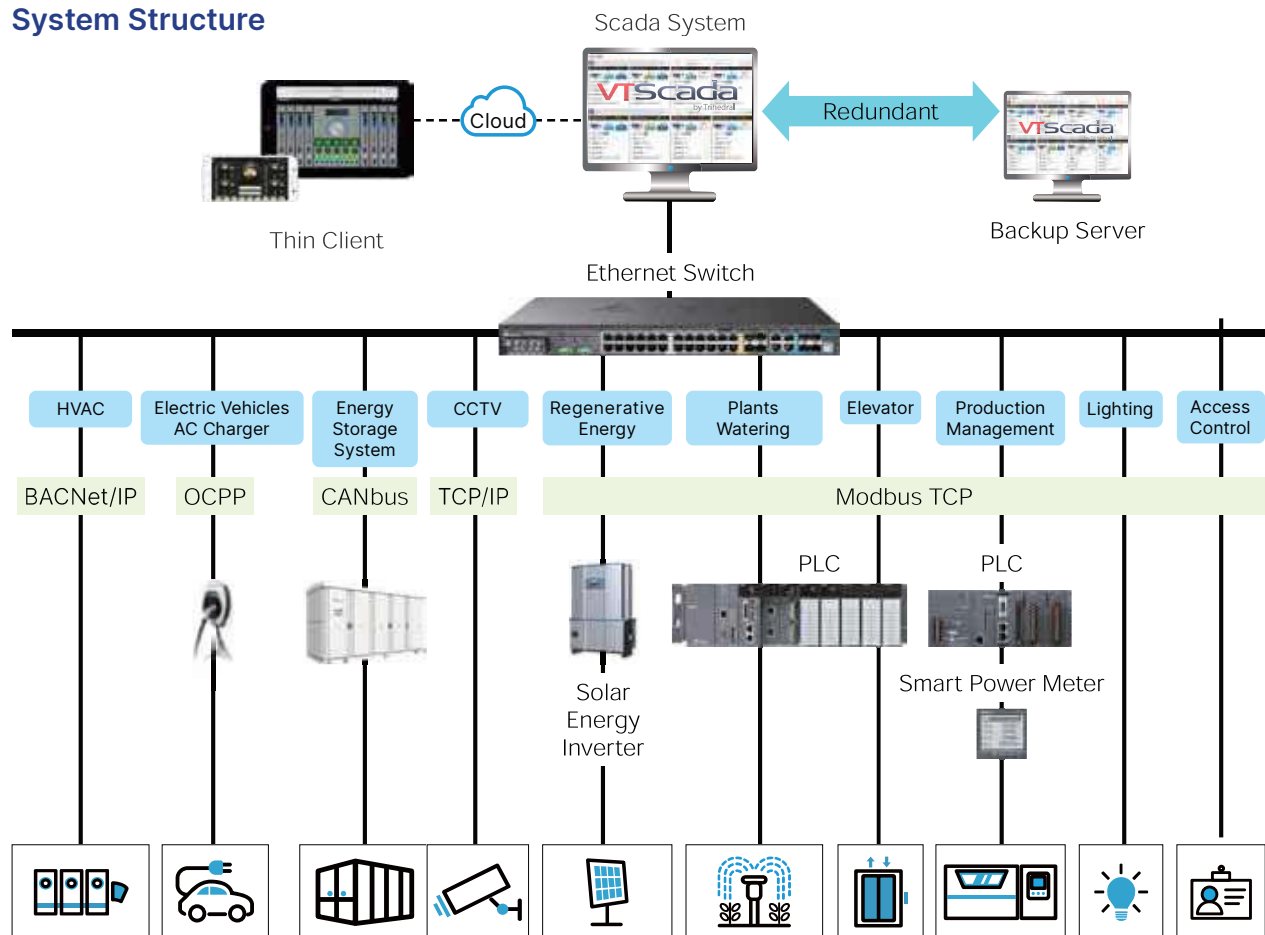# Smart SCADA

SCADA System
VTScada

Remote Real-time Monitoring for Factories

- Integrated architecture with one-time installation
- Diverse Driver Library with 100+ industry standard and proprietary protocols
- Built-in Historian database, no extra cost or configuration
- Achieves IEC-62443-4-1-ML 2 cybersecurity certification
- VTScada Thin Clients enables remote access from anywhere
- Instant-built intuitive screen with 200+ widgets, 4000+ graphics, and 3D pipes

System Structure

Scada System

Cloud

Redundant

Thin Client

Backup Server

Ethernet Switch

| HVAC | Electric Vehicles AC Charger | Energy Storage System | CCTV | Regenerative Energy | Plants Watering | Elevator | Production Management | Lighting | Access Control |

| BACNet/IP | OCPP | CANbus | TCP/IP | Modbus TCP |

PLC

PLC

Solar Energy Inverter

Smart Power Meter

Applications

Water & wastewater treatment, Oil & gas, Chemicals, Electronics manufacturing, Food & beverages
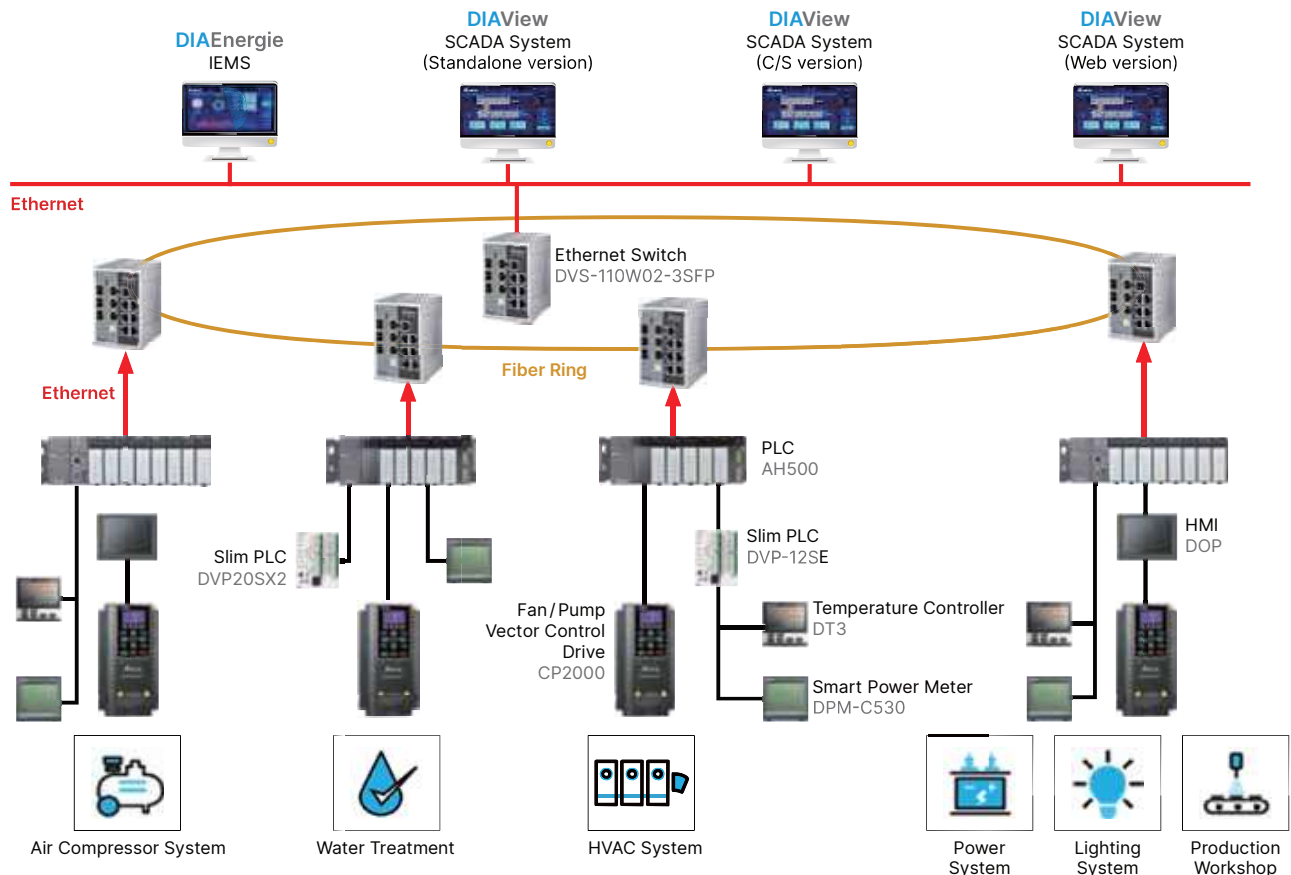
SCADA System

DIAView

Remote Monitoring for Smart Factory Management

- Seamless integration with Delta PLCs and I/O modules, supporting various industrial communication protocols and equipment drivers
- Web-Based CSS/HTML5 platform and WPF technology for intuitive & vivid displays and easy-to-navigate interfaces
- Variables Library and batch parameter editing for flexibility and high efficiency
- Diverse real-time data visualization: curve/pie/bar charts and reports
- Real-time and historical data analysis tools
- Efficient anomaly alarms and management
- Easy-to-learn VBScript language
- Reliable user authority management for different authorization levels

System Structure

DIAEnergie IEMS

DIAView SCADA System (Standalone version)

DIAView SCADA System (C/S version)

DIAView SCADA System (Web version)

Ethernet

Ethernet Switch
DVS-110W02-3SFP

Fiber Ring

Ethernet

PLC
AH500

Slim PLC
DVP20SX2

Slim PLC
DVP-12SE

HMI
DOP

Fan/Pump Vector Control Drive
CP2000

Temperature Controller
DT3

Smart Power Meter
DPM-C530

Air Compressor System

Water Treatment

HVAC System

Power System

Lighting System

Production Workshop

Applications

Smart manufacturing and smart machines, HVAC, Water treatment, Electronics manufacturing

# Smart SCADA

Industrial Energy Management System
DIAEnergie

Innovative Solution for Smart Energy Saving

- Remote monitoring and visualization of critical power data
- Data analytics by areas and user authorization levels
- Monitoring and analysis for energy performance goals
- Real-time alarms for anomalies
- Power consumption analysis for efficient electricity usage and cost savings
- Demand management and forecasts to avoid exceeding the electricity consumption threshold
- User-defined tools for report output and a variety of data analyses

System Structure
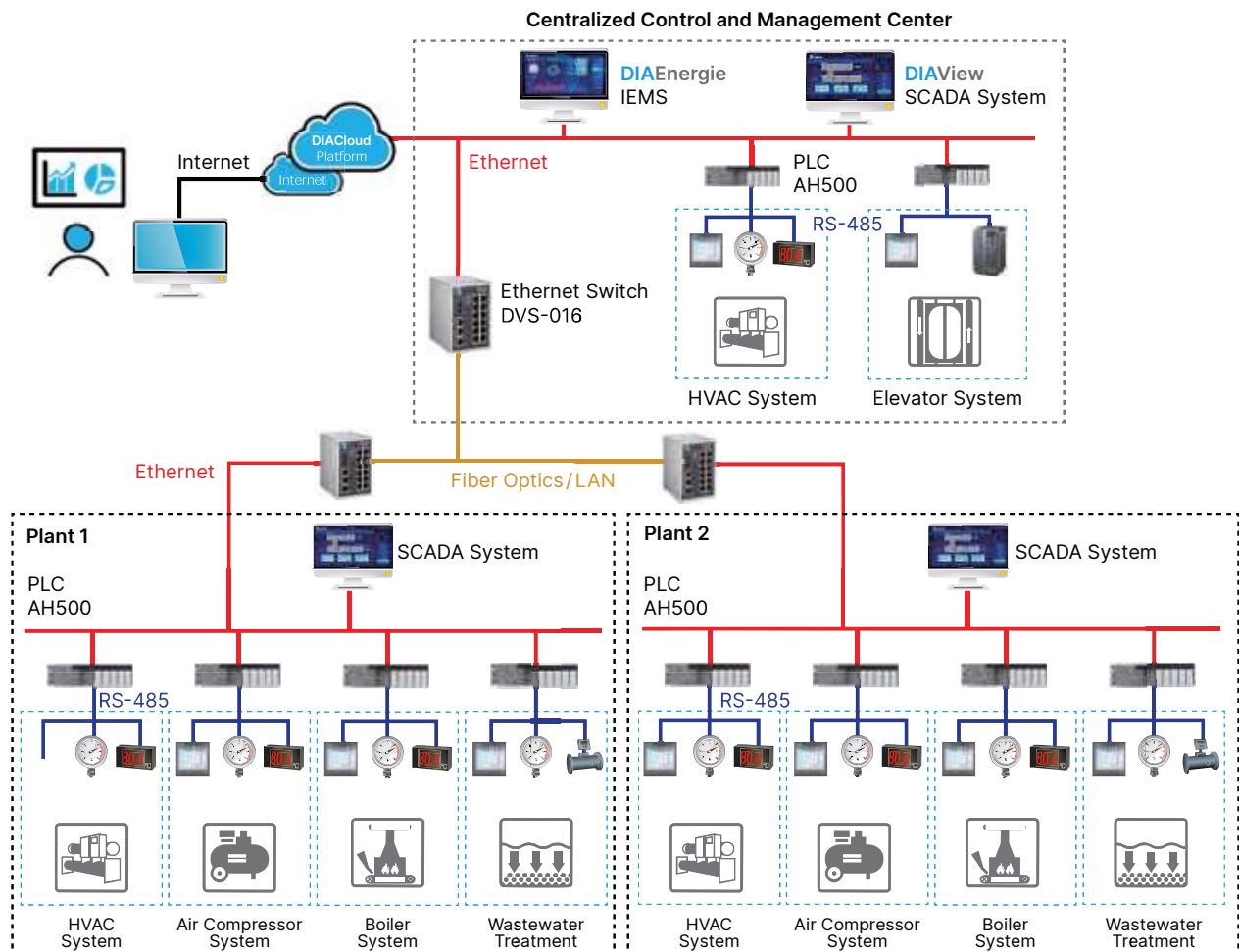
Applications

Energy saving, Environment control, Power monitoring and analysis, Facility management control

Data Integration Platform New
inData⁺

inData⁺ is a one-stop platform for digital transformation. By inData⁺ central server, subsystem data is managed, allocated, and integrated

Flexible and diverse data integration
- Provides mainstream protocols for OT and IT integration (OPC DA / OPC UA / Modbus / ODBC / MQTT / Web API)
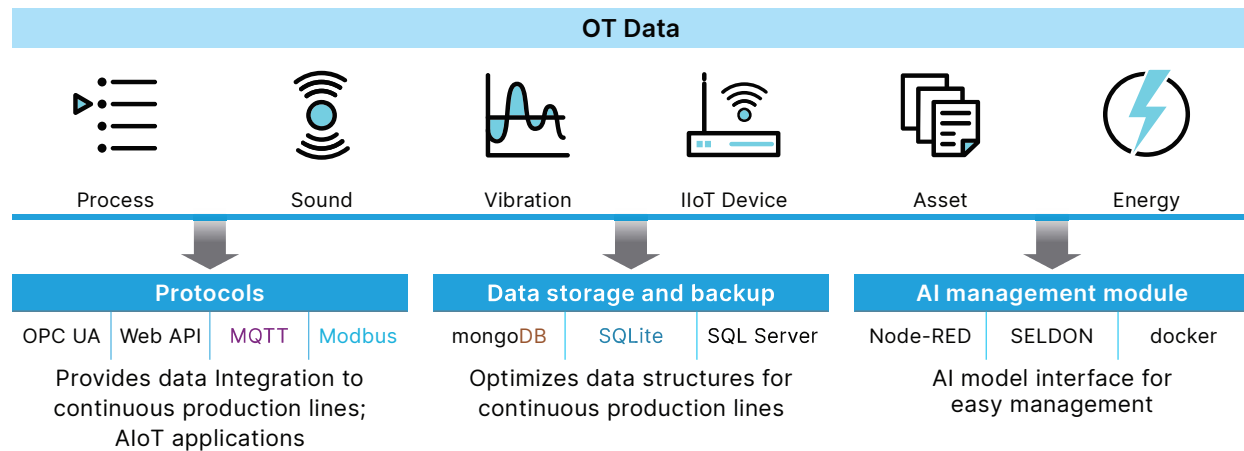

Rapid deployment and management of AI models
- Collects process information (temperature, pressure, flow) and equipment inspection data (vibration information, inspection reports)
- Provides additional features for AI model learning

System Structure

OT Data					
Process	Sound	Vibration	IIoT Device	Asset	Energy

Protocols	Data storage and backup	AI management module
OPC UA / Web API / MQTT / Modbus	mongoDB / SQLite / SQL Server	Node-RED / SELDON / docker
Provides data Integration to continuous production lines; AIoT applications	Optimizes data structures for continuous production lines	AI model interface for easy management

Applications
Petrochemical industry, Steel industry, and Fiber / textile industry; Other continuous production lines

Petrochemical

Steel

Fiber / Textile

Smart SCADA

Predictive Maintenance AI `New`
PdM AI

PdM AI is a robust solution for continuous processing industries, offering three core functions: real-time monitoring with OA, health / RUL prediction, and anomaly detection

Anomaly detection and alarms

- Real-time monitoring
- Immediate alert notification
- Historical data analysis & trends
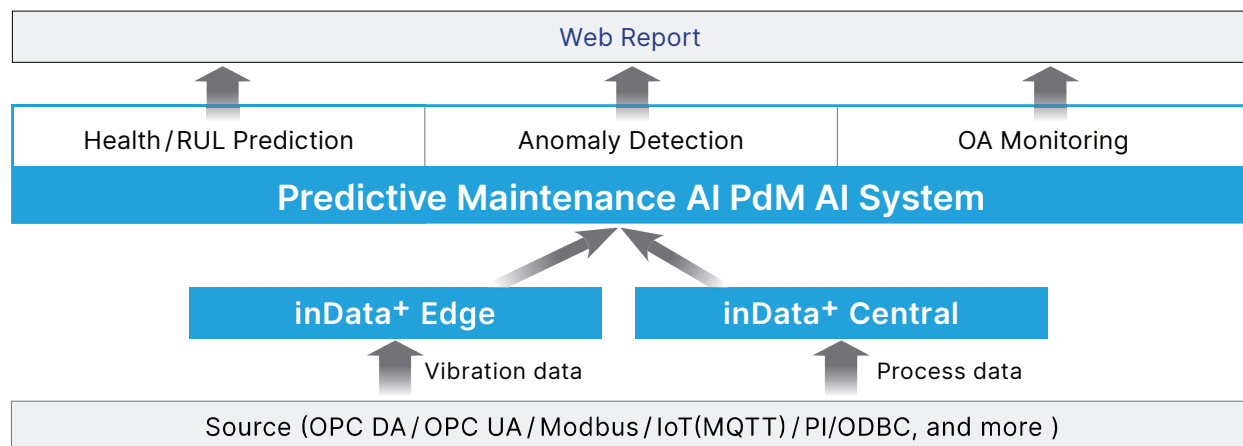- User-configurable alert thresholds

Failure root cause analysis

- Accumulation of experiences
- Cost reduction due to lower professional personnel turnover
- Effective anomaly management strategies
- Continuous improvement

System Structure

Web Report

Health / RUL Prediction	Anomaly Detection	OA Monitoring

Predictive Maintenance AI PdM AI System

inData⁺ Edge	inData⁺ Central

Vibration data　　　　Process data

Source (OPC DA / OPC UA / Modbus / IoT(MQTT) / PI/ODBC, and more)

Applications

Petrochemical, Steel, Fiber / Textile industry, Other continuous production lines

Petrochemical	Steel	Fiber / Textile

Data Mining Module `New`
Miner+

Miner+ empowers data intelligence in process improvement, equipment inspection, production, and quality control. With a user-friendly interface and seamless integration with inData+, users can extract data insights from the production process
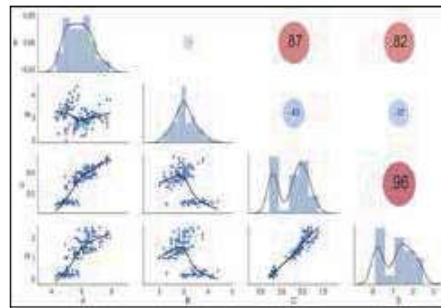
User-friendly data analysis capabilities

- Provides data intelligence for process improvement, equipment inspection, production, and quality control
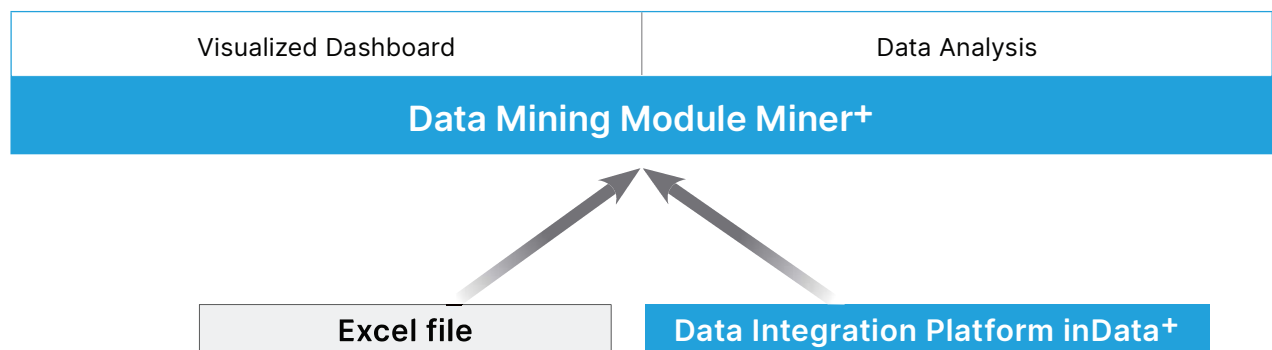- Factor analysis considers time delays in continuous production

Visualized dashboard

- Enables users to integrate data sources from the inData+ Data Integration Platform to achieve process improvement, equipment operation tracking, and process status monitoring

System Structure

Visualized Dashboard	Data Analysis
Data Mining Module Miner+	

Excel file	Data Integration Platform inData+

Applications

Petrochemical, Steel, Fiber / Textile industry, Other continuous production lines

Petrochemical	Steel	Fiber / Textile

ΔELTA

Smart SCADA

Spectrum Analysis System New
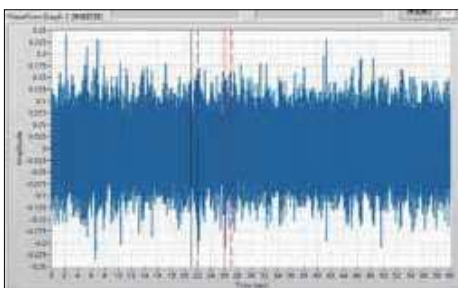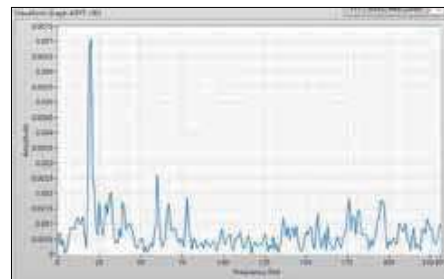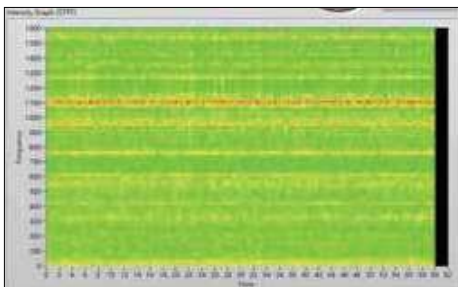### SPAS⁺

SPAS⁺ is an advanced vibration signal analysis tool designed for time-domain, frequency-domain, and time-frequency signals. It allows custom filtering, including high-pass, low-pass, and band-pass filters, for precise capturing of target frequencies. The unique defect frequency database offers automatic fault annotation, enabling users to quickly identify issues. SPAS⁺ supports database expansion to ensure the latest vibration data and effectively manages and analyzes vibration data to enhance equipment health monitoring efficiency

Integration with PdM AI system
- Real-time data synchronization
- PdM case study & insights
- Remote diagnostics and troubleshooting

Replaces traditional spectrum analysis
- User-friendly interface
- Historical data analysis and trend identification
- Customizable reporting and alarms
- Interactive data visualization & config tools

Applications

Petrochemical, Steel, Fiber / Textile industry, Other continuous production lines

Petrochemical

Steel

Fiber/Textile