



#### SYSTEM INTEGRATION | CUSTOM AUTOMATION | SCADA | CONTROL PANELS | TRAINING

TAS has become a trusted automation partner by providing best-in-class automation and wireless system design, integration, programming and commissioning services. At its heart, TAS is a team of highly experienced and dedicated automation, SCADA and telemetry professionals who are committed to making advanced technology, automation and engineering services work for our clients. Our goal is to apply our capabilities to our client's needs enabling them to thrive in today's competitive landscape.

#### HIGHLIGHTS

- Proven track record in automation design, integration, programming and commissioning
- More than 200 years of combined Automation Experience
- 100 years of upstream commissioning
- 100 years working with PLCs 25 Programmers on staff
- 70 years working with SCADA
- 50 years working with Telemetry and Wireless Networks
- 40 years working with ROC RTUs
- 30 years working with Totalflow Flow Computers
- 20 years working with SCADAPack
- Committed to, and known for, High Quality, Customer Satisfaction and Technical Ability



## UL508A PANEL / VFD SHOP

Our highly trained and knowledgably staff designs and builds panels, VFDs and custom solutions with reliability and field serviceability in mind. We start with top of the line components and finish with quality assurance and excellent documentation. Our solutions are tailor made for your application:

- User Interfaces Smart HMIs, Panel Meters, Gauges, Annunciators
- Communications Gateway, Concentrator, Media Conversion, Web Server, FTP, Cloud
- Environments Class 1 Division 1, Class 1 Division 2, NEMAxx
- Wired or Wireless I/O Analog, Discrete, Digital
- Power AC, DC, Solar (primary or backup)















Our team of highly experienced professionals designs, builds and commissions Custom Process and Industrial Automation Systems. We provide solutions that are tailor made for your application using the appropriate hard-ware to achieve your required results:

- Programming PLCs, RTUs, HMIs, Data Concentrators
- Data Acquisition/SCADA 1 to +10,000 I/O points, Historians, Enterprise Wide
- Controls PID, Access, Safety Lockout, Alarm Notification
- Drives Variable AC, DC, Soft Start, MMS
- Communications Gateway, Concentrator, Media Conversion, Web Server, FTP, Cloud
- User Interfaces Smart HMIs, Panel Meters, Gauges, Annunciators
- Turnkey Systems Panel Rack, Control Panels, Drives





### Rockwell Automation















#### FIELD SERVICES

TAS has an experienced staff of field automation specialist that provide troubleshooting, programming, and commissioning services.

- Troubleshooting Data reconciliation between end device and system, communication interfaces, overall system configuration
- Programming PLCs, RTUs, HMIs, Data Concentrators
- Commissioning Loop checks, panel terminations, system performance, site acceptance test



## TELEMETRY AND WIRELESS NETWORKS

In today's highly competitive market place, the winners are often those who have the lowest operating cost. Reducing operating cost covers many aspects, but a wireless network can be the means by which you achieve best-in-class performance in several key areas.

#### EFFICIENCY

- Move from managing by route to managing by exception to lower manpower and operational cost
- See and address production issues when they happen versus when they are discovered
- Reduce commissioning cost by use of wireless versus the cost of conduit, wire and I&E labor

#### REDUCE THE COST OF YOUR EXISTING NETWORK

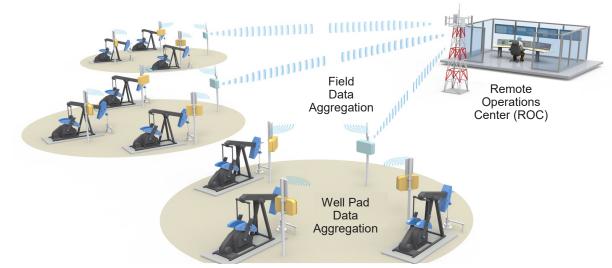
- Consider the ROI of building your own network versus paying Cellular or Satellite fees month after month
- Employ new technologies to get away from expensive outdated technologies.

#### SAFETY AND ENVIRONMENTAL COMPLIANCE

- Remote monitoring and reporting to ensure regulatory compliance
- Alert personnel to site issues such as H2S, LEL or Spills prior to arriving at site

#### SECURITY

- Use motion sensing cameras to monitor assets
- Remotely and/or automatically authorize truck loading and unloading operations



Example



## TRAINING

As we are out in the field meeting our clients one particular need continually comes up, "my guys need more training." In 2007, it was projected that between 2014 and 2017 more than half of the skilled Oil & Gas work force would retire. Well to one degree or another that is happening not only in Oil & Gas, but across the Automation landscape. At TAS we have developed training courses aimed directly at what our clients are asking for. Today we offer Modbus, Basic Instrumentation, and Intro to PLCs courses and are working on adding more based on direct client request.

#### MODBUS

Have you ever had a problem understanding or utilizing Modbus? If so, you are not alone! While the Modbus protocol has been around since 1979 with millions of active devices in use, it is among the most misunderstood and problematic protocols in the field today. This course will allow the end user to learn and benefit from years of real-life industry experience.



#### PLC

Using hands-on demonstrations in this PLC training, we frame the challenging world of automation and Programmable Logic Controllers (PLCs) into practical, simple lessons that are easy to understand. Students will learn to understand PLC language, read, and interpret PLC ladder logic, troubleshoot PLC programs, and fix the most common PLC problems on their own. Curriculum will also cover communications between PLCs, SCADA, DCS, and devices in the field.



#### **BASIC INSTRUMENTATION**

This is an introductory training course that covers the different types of measurement and analytical instrumentation used in a wide range of industries and applications. This course will equip you with the basic knowledge of instrumentation and what it will take to achieve the results your particular measurement requirements call for.



You've heard the expression "a chain is only as strong as its weakest link". At TAS we believe that applies to every aspect of our work and solutions. With that in mind, we have chosen to distribute products in which we believe are market leaders in terms of quality, total cost of ownership, and functionality which represent our "go to" products when designing our own solutions.







# **PULS**









- Programmable Logic Controllers
- Variable Frequency Drives
- Human Machine Interfaces
- Wireless Backhaul Networks
- Wireless Canopy Network Access
- Wi-Fi and IIoT
- Measure O2 in Natural Gas
- PPM Optical Oxygen Measurement
- PPM Dissolved Oxygen Measurement
- Din Rail Mounted Power Supplies
  - 1-Phase, 3-Phase & DC/DC Converters
- HMI Operator Panels
- DIN Rail Mounted Controllers
- Protocol Converters
- Cellular Modems
- Unmanaged and Managed Ethernet Switches
- Wireless Remote Asset Monitoring and Control
- Class 1 Div 2 Wireless Nodes for HART, Modbus, Analog, Digital, Turbine, Thermocouple, RTD
- Class 1 Div 2 Solar Power
- HMI Protector and Shade
- High-pressure quick connect for pressure transmitters
- Solar Power components and systems
- Process Instrumentation
- Process Connectivity
- Intrinsic Safety Barriers
- Class 1 Div 2 Cable Sets



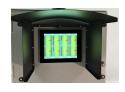
















TAS

2725 114th Street, Grand Prairie, TX 75050

(817) 799-5228

sales@txautosys.com

www.totalautomationsystems.com