



CTL

Leading with Expertise

Experience without
Boundaries: Design, Procure,
Construct, Commission
and Competitiveness.



CTL is an in-house technology solutions provider that specializes in 360 degree engineering products and services to high tech industries

ctltech.com

ABOUT US

Control Technologies Limited accelerates industry excellence.

An in-house technology solutions provider that delivers 360-degree engineering products and services to oil and gas, utilities, petrochemical chemical and other sophisticated, high-tech industries. Control Technologies Limited started as a traditional instrumentation and automation industrial solutions provider, hence the name. Today, the name represents an evolved and established regional provider of high-quality security, telecommunication, instrumentation and automation services for over 22 years. We have lasted this long because of the expertise of our dedicated staff. Customers trust our team to execute and support them for the long term because Control Technologies Limited creates a superior customer experience.

- Unmatched Measurement application expertise.
- We sell quality reliable products from recognized reputable vendors
- World Class Systems Integration Capabilities – design, procure, assembly, installation, testing and commissioning.
- Able to provide cost effective solutions to meet customer needs.
- Have executed complex projects for customers including international EPC companies like ABB, Bechtel, KBR and Technip.
- Growing installed base of 100+ projects implemented since 2001 when we installed WASA Caroni Arena and Navet SCADA systems.
- Client Satisfaction is a priority.
- Support of all installed equipment and systems.
- We are Geographically Spread out in Caribbean

 Trinidad |  Guyana |  Barbados |  Jamaica



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At CTL we have a common goal to meet our customer expectations and build long-term clients. We have both loyal employees and clients that have made us a leading uniquely-qualified and experienced partner that many essential companies turn to locally and regionally.

Kenny Lue Chee Lip
Managing Director



MANAGERS (L-R):

Dianne Maraj-Ramdeen, Jameel Mohammed, Ronald Ramlal, Ajit Sugrim.

INNOVATIVE



CTL is Bold:

Expanding into new frontiers by winning large, complex first-time projects.

- Our first SCADA project was for automating 2 large Water Treatment plants with capacities of 75mgpd and 20mgpd. Twelve Rockwell PLCs were installed with fiber optic and wireless communication networks. Project was valued over US\$1M. After 22 years, these systems are still in operation.
- Our first Telecom project was awarded to us by a major International EPC Contractor, Bechtel for the 56" diameter Cross Island Project in Trinidad. It included microwave links, multi-plexors, Communication towers, Rockwell PLCs, Triconex ESD system. Project was worth over US\$5M.
- Our first CCTV and Intrusion detection system was for a Natural Gas Accumulator company for over 50 cameras including many specialized explosion proof cameras across 11 sites with broadband wireless and fiber optic links.
- Our first offshore project was to design, procure, assemble and install, Distributed Control System and Emergency Shutdown System for a floating oil production facility. We also designed and provided all instrumentation to measure heavy crude oil.

EXPERIENCED



CTL is Solid:

We have designed and built Turnkey Systems for all Industry Segments across the Caribbean.

- Unmatched Application expertise acquired from over 24 years in existence and over 300 projects implemented. All Managers have over fourteen years working in CTL and combined 100 years of engineering experience.
- Our first SCADA project implemented 22 years ago continue to control the two largest water treatment plants in Trinidad producing close to 100 million gallons per day.
- The Cross Island Pipeline project involved installing the tallest freestanding communication tower in Trinidad at 135 meters. We set up data communication links across the whole southern half of island that still in operation 18 years now.
- We have since 2007, supplied and installed over 200 cameras across Trinidad and Tobago for national company involved in Gas Distribution. Many sites have Access Control Equipment and Intrusion Detection equipment as well all integrated together to effectively monitor and protect company assets.
- Supplied Equipment and Implemented Projects in all sectors–
 - *Oil and Gas*
 - *Petrochemicals*
 - *Mining*
 - *Infrastructure*
 - *Food and Beverage*

INDUSTRY LEADERS

CTL is All-Important:

Providing cutting edge products and solutions engineered to reliably meet customer needs in a cost effective manner.



WATER UTILITIES SOLUTIONS

DMA implementation with flow and pressure data loggers, Pressure Management, Automation solutions and Water Management Software that are used in Non-Revenue Water reduction and to improve Service levels.

VARIABLE SPEED DRIVES

We can design and implement VFDs for HVAC, pumping and conveyor systems from ABB and Danfoss. Specialized drives with apps developed for pumps and oil production are available. Can also supply VFD for MV systems.

NATURAL GAS MEASUREMENT

Custody transfer systems using Ultrasonic flow meters, Total Flow Computers with pressure and temperature compensation, Gas Chromatograph and Sampling Systems to provide accurate flows and energy content.

WIRELESS SOLUTIONS

Licensed and unlicensed radios for data and broadband communications available selected from a variety of vendors to meet specific needs. UHF, VHF, microwave and satellite radios available. We do radio path studies to ensure reliable links are established.

FLOW METERING

For water utilities we provide ABB Bulk flow meter for up to 96" diameter water pipelines, Kamstrup domestic water meters using ultrasonic principle. For other industries we provide Coriolis mass flow meters, Vortex meters, Clamp-on ultrasonic meters.

PLC UPGRADES

As Rockwell Automation System Integrators, we can provide upgrades to existing obsolete PLC systems. We do surveys and reviews of existing systems and offer cost-effective upgrades considering plant operations and availability. We can also convert old relay based systems to PLC controls.

EMERGENCY SHUTDOWN SYSTEMS

We have certified Safety Engineer experienced in SIL studies and ESD implementation. We provide Consultancy services in system expansions and upgrades. Triconex system support available.

SCADA SYSTEMS

Pipelines and Plants monitoring using RTU/PLC controllers and modern HMI systems is our specialty. We have done Integration with other data applications and systems like GIS. Full turnkey services from design, procurement, assembly, testing and installation offered.

SPECIALIZED SECURITY SOLUTIONS

CTL Has An Impressive Track Record:
We Provide Tightly Integrated Systems that use the Latest Technologies in a rapidly evolving field.



CCTV

We select cameras based on customer needs and budget. High-end sophisticated systems that store actionable video is our specialty. Long term storage solutions on in-house NAS or cloud service are provided. Specialized Explosion-proof, Thermal Imaging and NIR long range cameras are provided when needed.

ACCESS CONTROL

Card, Biometric or Phone readers with wired or wireless door locks Or barrier lifts are components of modern Access Control Systems. We provide stand alone or Enterprise wide ACS with tight integration to CCTV systems to prevent unauthorized entry. Mustering systems and Time and Attendance software are also provided.

MASS NOTIFICATION SYSTEM

Paging and General Alarm systems can be provided for oil and gas or other high risk facilities. Specialized horn and speakers to cover wide areas with discernible messages are provided to ensure safety of personnel. We can provide commercial and City-Wide Notification systems as well.

INTRUSION DETECTION

Wide area vibration or fiber cable systems are typically used for intrusion detection along fence lines. PIR, Radar or Lidar detectors are used for open field to be monitored. Integration with PTZ cameras to slew to breached area is typically setup to get visual confirmation of intruders. Burglar alarm systems for commercial offices are also provided.

FIRE & GAS DETECTION AND SUPPRESSION

We can design Fire and Gas Detection systems using multiple sensor technologies to ensure no false positive alarms - IR, Open Path Triple IR, Catalytic beads, CCTV technologies. Deluge, Foam and specialty agents systems for fire suppression can be designed and supplied to protect any area from fires

ASSET TRACKING

RFID tags can be attached to any Asset with suitable placed Readers to detect unauthorized removal of Assets from a facility. Tags can be active or passive depending on the application and long range readers are available. This is useful in ports and warehouses and even to track paper files.

LICENSE PLATE RECOGNITION

Accurate reading of License plates in any country is possible using tried and tested LPR optical recognition software even at high speeds, day and night. We have implemented LPR for auto entry at barrier lifts and set up alert lists for stolen vehicles. Reading of cargo container numbers or any other lettering is also possible.

VIDEO ANALYTICS

Removed Objects, Loitering, Appearance Search, Unusual Motion Detection, Heat Maps are all advanced Analytics we can implement in the CCTV camera or on Head End servers. Facial recognition if desired can be implemented using specially placed cameras to give best results. Implementing Artificial Intelligence is enabling a growing list of autonomous monitoring features.

SPECIALIZED PRODUCTS

CTL Represents Top Tier Manufacturers Of E&I Equipment:

We Provide Specialized Measurement, Control and Electrical devices for all commercial and industries needs.



CONTROL VALVES

Valmet provides reliable general purpose and severe service control valves for all processes. Control valves are the most important part of any process control loop, vital in stabilizing processes. Neles™ control valves are engineered, manufactured, tested and optimized for your specific application. Our flow control solutions offer reliability, productivity, and sustainability, allowing you to maximize your output and profitability.

FLOW AND LEVEL

ABB manufactures a complete range of flow measurement devices - Differential Pressure, Vortex, Swirl, Magnetic, and Coriolis, for all line sizes, temperatures and pressures. ABB Level instruments using Radar, Laser, Capacitance, Magnetic float Gauges for all industries are available.

FIXED GAS DETECTION

On an industrial facility, hazardous substances are part of the daily routine. However, with the right solutions and reliable equipment, the threat of explosive gas leaks or overexposure to toxic hazards can be drastically reduced. Dräger's complete portfolio of fixed gas detectors includes an extended range of toxic, flammable and oxygen monitors that interface seamlessly with our range of control systems and other components, even third-party devices.

HMI SOFTWARES AND DISPLAYS

We are System Integrators for Schneider Electric and Aveva who are leading providers of SCADA systems. Oil and Gas production and distribution systems are our specialty.

WATER UTILITIES

Netbase is a flagship product and is a data rich hub that acts as a Digital Twin of a water operator's network; providing source to tap insights. A suite of best-practice applications utilize this unified data hub to provide utility practitioners with the tools and analyses to monitor, operate, optimize, manage and support their network more efficiently for Water Network management and reduction of Water Losses.

ELECTRICAL DISTRIBUTION

ABB provides a complete portfolio of Electrical Distribution Equipment – Transformers, Capacitor Banks, Protective Relays, Breakers, Motor Control Centres and Switchgear. As a company with a Global supply chain, we can also supply other brands depending on specs, lead times and of course budget. LED lights, receptacles and cabling are all available from a myriad of suppliers.

VARIABLE SPEED DRIVES

ABB and Danfoss VFD Solutions can boost the productivity of your processes, improve energy efficiency and cut maintenance costs. You can rely on a broad portfolio from micro and machinery drives for machine building to industrial drives for controlling processing lines, all the way up to industry specific drives with purpose-designed features and functionality.

PHOENIX CONTACT

We provide a complete portfolio of components to build control panels – terminal blocks, fuse disconnects, lugs, wire markers, labeling printers, tools, power supplies, all for Phoenix Contact. They also provide Surge Protectors, Communication Switches, Wireless Radios. Solar systems cabling, protection and monitoring and control systems are also available.

TRUSTED

Our Engineering Experience and Work Ethics have earned client Trust to Improve Operations and Protect Critical Facilities.



REPLACEMENT OF SCADA FOR NATURAL GAS PIPELINES

CTL was selected by a Large Gas Distribution Company from amongst a set of international companies to replace an obsolete SCADA system with a modern HMI with advanced functionality and interfaces to numerous third party applications. We implemented High Intensity Graphics so operators could focus and more easily discern process upsets. This project had 20,000 points and 200 custom built graphics across 70 sites.

CONSULTANTS FOR UPGRADING EMERGENCY SHUTDOWN SYSTEMS IN GAS PLANT

From inception, CTL was involved with implementing Emergency Shutdown Systems on a Gas Facility with five separate but connected systems. Over the years since plant startup, Client has continuously hired our services to modify their ESD logic as the plants required. When the existing system were replaced because of obsolescence, CTL engineers provided invaluable support to ensure all existing logic and functionality were implemented on the new system.

SOLE SOURCE CONTRACTOR TO IMPLEMENT SECURITY OF OIL AND GAS FACILITIES

A Major International Oil and Gas Company needed to install CCTV cameras across all their facilities and upgrade poorly performing cameras on their offshore platforms. Through many consultations with them, CTL demonstrated we had the experience and technical knowledge they required and thus was sole sourced to provide CCTV and intrusion detections systems. Many cameras were solar powered and wireless links were utilized.

NRW SOLUTIONS FOR WATER UTILITIES

As utilities across the Caribbean Region seek to improve their operations and reduce Non-Revenue Water, several have turned to CTL to provide flow meters and data loggers to establish District Metered Areas and identify zones with highest losses. CTL saw the opportunity to help utilities even further and have expanded our services to include Network Management software, Netbase, from Crowder Consulting. This software integrates all existing data sources like SCADA, billing, loggers, maintenance systems, to alarm on abnormal events, calculate Water Balances and KPIs so the utility performance can be constantly monitored.

TESTIMONIALS

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The quality of their work both in engineering and installation has been top-notch. Unlike most other contractors in the security field, they have a strong Technical staff that is very knowledgeable and able to design and implement integrated systems that meet our needs. CTL has provided reliable integrated Security Systems for NGC and have backed this up with excellent support for these installed systems. NGC is very satisfied with CTL's performance in supplying Integrated Security Systems that meet our needs.



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Control Technologies Limited, has always executed their work in a highly professional manner and has shown a commitment to building a professional and mutually beneficial relationship with PROMAN AG (TRINIDAD) LTD.

We are pleased to recommend CONTROL TECHNOLOGIES LTD., knowing that their professionalism and expertise, along with their reliable service will enhance similar projects undertaken.



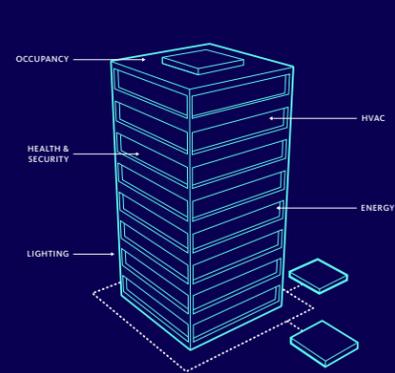
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CTL work was an integral part of the overall grassroots pipeline project designed to deliver gas to Atlantic LNG Train 4. CTL assumed full responsibility for their assigned scope of work and showed the required technical competence to successfully implement the project scope.



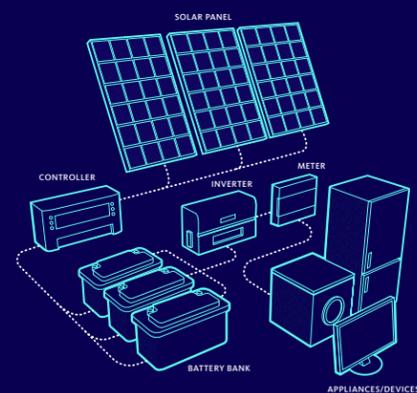
EVOLVING

Continuous growth and diversification is part of CTL DNA Leveraging off our experience and knowledge, we continue to look for new segments and technologies to expand into.



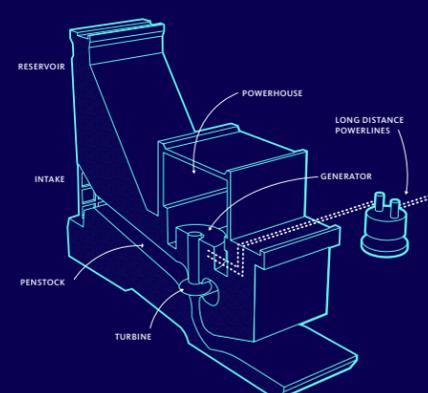
BUILDING MANAGEMENT SYSTEMS

We can integrate products and services such as motion detectors, harmonious lighting, door communication, automated heating, air-conditioning, ventilation and shutter management, with a range of possibilities to automatically control your building. With a seamless integration, we can provide industrial and commercial entities the flexibility to building management but it has a positive effect on efficiency, security and productivity.



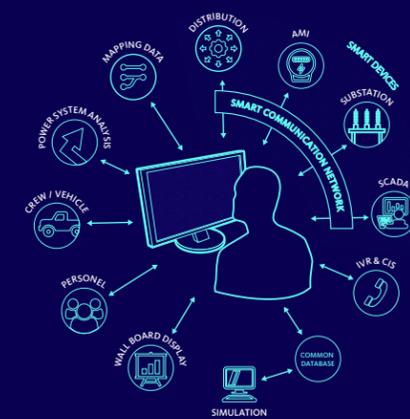
UTILITY SIZED SOLAR POWER SYSTEMS

We recognize that as electricity costs continue to rise along with global concerns over hazardous emissions and climate change. CTL has the technical competence to bid, design, construct and integrate solar power solutions as a clean, renewable alternative for utility-scale energy providers to ensure an economically viable, constant source of electricity during peak demand periods



HYDRO ELECTRIC DAM POWER GENERATION

Hydroelectric power generation is an important source of renewable energy that relies on the energy of falling water to produce electricity. CTL is well positioned to handle the engineering design, operation, and maintenance of hydroelectric power plants as it requires careful planning and management to ensure the efficient and safe operation of the facility.



ELECTRICAL SCADA

Designing, supplying, installing, and maintaining Electrical SCADA system involves a comprehensive process that requires expertise in electrical engineering, software development, and cybersecurity. CTL is an experienced vendor that can ensure the system meets the desired customer requirements and operates reliably and securely.



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GET IN TOUCH

We can't wait to
start a conversation.

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