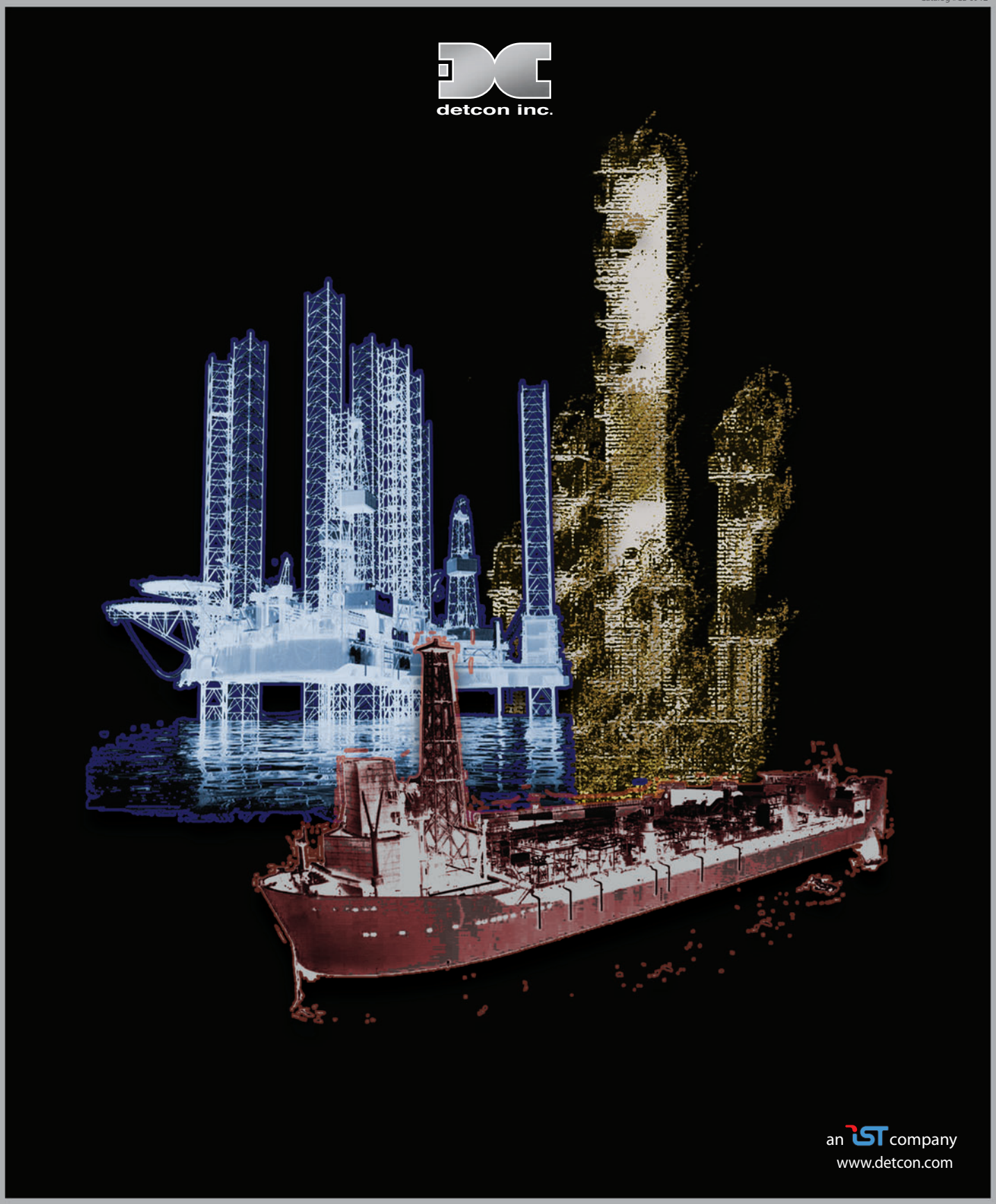
INDUSTRIAL GRADE GAS DETECTION

"DETECTING THE... *Difference*"

Catalog #CB 0912



Houston ▪ Odessa ▪ Shanghai ▪ Dammam ▪ Del Carmen ▪ UK

Company Profile

Detcon's Headquarters is in The Woodlands, Texas just North of Houston.

ISO 9001: 2008 Certified

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ATEX QMS Certified

HART Certificate of Membership

ABS QMS and Product Certified

Company Mission

Detcon is a global leader in the design and manufacturing of a wide range of industrial grade gas detection sensors and electronic control systems. Detcon was established in 1983 and began commercial activity with its first products in early 1985. Today the company has grown to include a wide range of sensor technologies and state of the art product designs engineered to perform reliably in the most challenging and rugged industrial environments. Detcon's growing success is achieved by fusing decades of field experience with engineering expertise to produce superior products and innovative solutions. Our corporate objective is simple:

> "To provide products and services of the highest quality so that we establish an unequaled level of trade name recognition and trust."

Detcon accomplishes this objective by adhering to a rigid quality assurance program, and by keeping in close contact with the needs of its customers. Today, Detcon is helping companies around the world ensure safety and maintain productivity at the highest level.

ISO 9001: 2008 Certified

Detcon's product design and manufacturing process is based on continuous quality improvement and a TOTAL QUALITY MANAGEMENT program. The program is designed to address and meet the needs of its customers while improving the overall management of the company. The Detcon Quality Program has been certified to the ISO 9001: 2008 standard by an accredited third party registrar.

Quality Policy

Detcon, Inc. will continuously improve its products to better satisfy the needs of its customers and will deliver, on time and every time, defect free products and services.

Model Series 700 Sensors

Environmentally Bulletproof

- Water-Proof
- Corrosion-Proof
- Vibration-Proof
- Multi-Layer Surge Protection
- Pre-emptive Fault Diagnostics

Detcon Model Series 700 industrial gas detection sensors are a new generation of intelligent sensor modules. This new level of environmental durability includes an electropolished 316 stainless steel housing, multi-layered transient spike protection circuitry and 100% encapsulated electronics. The sensor electronics are completely protected and immune to water ingress and corrosion. The gas detector sensor elements are all plug-in components and can easily be replaced in the field.

Detcon Model Series 700 sensors have been assessed a SIL2 rating by Exida, a leading assessment organization.

Integration Options

- Remote / Alarm Module
- Hart Module
- Foundation Fieldbus Module
- Wireless Interface Module

Detcon's Model Series 700 can be configured to meet a wide range of applications by utilizing available integration options. Remote operation, communication protocol options, relay output and other options are available.

CHEMFET MOS
Solid State H2S Sensor

CATALYTIC
Combustible Gas Sensor

INFRARED
Combustible Hydrocarbons & CO2 Sensors

ELECTROCHEMICAL
Wide Range of Toxic Sensors

OXYGEN
O2 Deficiency Sensor

PHOTO IONIZATION
Volatile Organic Compound Sensors

Model Series 500 & 600 Sensors

Intuitive Diagnostic Intelligence

- Non-Intrusive Interface
- 4-20 Milliamp Output
- Class I, Division 1, Groups B,C,D
- Integral Sensor Fault Diagnostics
- Options
  - Modbus RTU RS-485
  - Alarm Relays
  - HART
- Modular Design
  - Easy Maintenance
  - Easy Remote Sensor Mounting
  - Plug and Play Sensors and Transmitters
  - Intuitive Operating Software

CHEMFET MOS
Solid State H2S Sensor

CATALYTIC
Combustible Gas Sensor

INFRARED
Combustible Hydrocarbons & CO2 Sensors

ELECTROCHEMICAL
Wide Range of Toxic Sensors

OXYGEN
O2 Deficiency Sensor

Model Series 100 Sensors

Simple, Affordable, Durable

- Non-Intrusive Interface
- 4-20 Milliamp Output
- Class I, Division 1, Groups B,C,D
- Integral Sensor Fault Diagnostics
- Fully encapsulated electronics
- Options
  - Junction Box
  - Loop Powered Display
  - Alarm Relays
  - HART
  - Modbus Adapter
  - Wireless Communications
- Modular Design
  - Easy Maintenance
  - Plug and Play Sensors
  - Intuitive Operating Software

ELECTROCHEMICAL
Wide Range of Toxic Sensors

OXYGEN
O2 Deficiency Sensor

SmartWireless® Technology

Model RXT-300 & RXT-320 Wireless Transceivers
Rechargeable Smart Battery Packs
Low Power Gas Detection Sensors, Alarm Stations and HMI
Solar Charging Options

- Universally Acceptable Frequency 2.4 GHz
- Low Power Requirement
- 1.5 Mile Line-of-Sight Range
- Robust Mesh Network Topology
- Network Capacity up to 32 Devices
- Flexible I/O Options
- Distributed Alarm Processing
- No Controller Required (RXT-300 only)

Detcon Model Series RXT-300/320 SmartWireless® transceivers are ideal for use in transmitting signal data in a wide range of industrial detection and alarm system applications. Signal data can be analog 4-20 mA DC or serial MODBUS. Wireless network integrity and security is accomplished using direct sequence spread spectrum wireless mesh technology. Wireless applications can be as simple as a single field device communicating with a host controller or any number of field devices forming a network of subscribers. This unique and innovative technology is designed to create a robust network that automatically routes around congestion and line-of-sight obstacles, while improving throughput as subscriber device density increases.

Compact & Standard SmartWireless® Sensor Assemblies

- Model CXT low power gas detection sensors for toxic gases (electrochem) and combustible hydrocarbons (IR)
- Smart rechargeable battery packs with integral safety circuitry, built-in charge gauge and low voltage cutoff
- Six months run time (rechargeable batteries), two months (disposable "C" cells), eight months (disposable "D" cells)

SmartWireless® HMI Panel

- 8 and 32 channel capacity panels with real-time 4 line 40 character LCD
- Field device status and location tag
- Alarm condition LEDs & non-intrusive operator interface
- NEMA 4X fiberglass or stainless steel, and NEMA 7 packages

SmartWireless® Alarm Stations

- 4-6 hours continuous operation in full alarm
- Smart rechargeable battery packs with integral safety circuitry
- Optional solar charging panel

Solar Power

- 1.5 watts
- 10 watts
- 20 watts
- 40 watts

Smart Battery Packs

- High energy lithium ion battery technology
- Charge gauge with low voltage disconnect
- Digital output indicating charge level
- 10 AH @ 12 VDC, 5 AH @ 24 VDC

Single Sensor Control Card Systems

Model 10 Series - 2 Alarm Level

- 4 to 16 Channel Packaging
- Programmable Relays (2 Alarms + Fault)
- NEMA 1, 4X, and 7
- Modular Plug-in Design
- Compatible with PLC's, SCADA, DCS
- Outputs: 4-20 mA, RS-485, & 2 Alarms
- Addressable via RS-485 Serial Communication
- Alarm Disable Function

Detcon Model 10 single channel digital control modules are designed to supervise and display the status of a single remote sensor assembly. Modules are available for a variety of toxic and combustible gases and are compatible with a complete line of Detcon enclosures and mainframe hardware assemblies.

410-N1-24VDC

810-N1-24VDC

1610-N1-24VDC

610-N4X

610-N7

1010-N4X

1610-N4X

Model 12 Series - 3 Alarm Level

- 4 to 12 Channel Packaging
- Programmable Relays (3 Alarms + Fault)
- NEMA 1, 4X, and 7
- Modular Plug-in Design
- Compatible with PLC's, SCADA, DCS
- Outputs: 4-20 mA, RS-485, & 3 Alarms
- Addressable via RS-485 Serial Communication
- Alarm Disable Function

Detcon Model 12 single channel digital control modules are designed to supervise and display the status of a single remote sensor assembly. Modules are available for a variety of toxic and combustible gases and are compatible with a complete line of Detcon enclosures and mainframe hardware assemblies.

612-N1

1212-N1

412-N4X

812-N4X

1212-N4X

Multi-channel Control Systems

Model X40 Series Control Systems - 2 to 32 Channels

- Completely User & Field Programmable
- 3 Adjustable Alarm Level Relays, 1 Fault Relay
- Alarm Silence and Alarm Reset Feature
- Data Logging of TWA, Peak, Cal & Alarm Events
- Addressable RS-485 Serial Communication

Detcon's Model X40 family of gas detection control systems are available in 2, 8, and 32 channel versions. A microprocessor based control card supervises and displays the condition of any field mounted gas detection sensor with a 4-20 mA or serial RS-485 output. A backlit alphanumeric display provides indication of gas type and current reading and includes a simple menu driven interface used for system configuration of gas type, range, alarm set-points, and relay outputs.

Model MCX-32 Control System - Up to 64 Channels

- Completely User & Field Programmable
- 6" monochrome LCD with touch-screen user interface
- Analog, digital or Modbus RTU serial input capability
- Readily field expandable with auto configuration capability
- Versatile distributed I/O installation options
- Lightning & over-voltage protection standard
- Data logging: alarms, cal, comm errors, faults, peak & average readings

Detcon Model MCX-32 is a multi-channel integrated control system with a capacity of 64 active channels. It can receive and supervise inputs from a wide range of field devices with either a 4-20 mA DC or serial output. The standard serial protocol is RS-485 Modbus RTU. This unique system design features "auto-configuration" of addressable devices that are located in a device library. The Model MCX-32 controller provides a unique combination of "auto configuration" simplicity and ease of use with customizable expansion capabilities.

Portable Gas Detectors

PS200

V!SA

T.ex

GT

PS200 4-Gas Detector

- Ideal for Hotworks and Confined Spaces
- Monitors LEL, 02, CO, H2S
- Internal Pump w/easy Activation
- Data Logging as Standard
- Auto Bump and Calibration Station
- Optional Colored Rubber Boots

V!SA 5-Gas Detector

- The Rugged, Reliable Safety Solution
- 14 Plug-and-Play Smart Sensors Available
- Flexible Configuration Options
- Built-in Pump for Remote Sampling (optional)
- High Impact Rubberized Case
- On-board Data Logging (optional)

GT Series 1 Instrument, 7 Applications

- Manual & Automatic Data Logging
- Integral Flashlight
- Alkaline or Rechargeable Battery Options

  Leak Test Mode , Confined Space Mode, Barhole Mode, Purge Mode, Sniffer Mode, Pressure Mode, Carbon Monoxide Mode

T.ex Portable Single-Gas Detector

- Contractor Mode in One Single Gas Monitor
- Monitors O2, CO and H2S
- Fully programmable Menu:

  Alarms, Contractor Mode, Latching/non-latching Alarms: Audible, Visual, Vibration, TWA, STEL, Low Battery, and End of Life

Detcon offers a comprehensive line of Gas Measurement Instruments (GMI) brand portable gas detection products that combine advanced technology with rugged durability. These innovative products meet the increasing demands of a broad range of industrial applications offering the end-user everything from customizable features to easy one-button functions. Visit www.gmiuk.com for a complete line of portable gas detection instruments.

Natural Gas Pipeline Analyzers

Model Series 1000 H2S, CO2, & O2

- Continuous Measurement with Superior Uptime
- H2S Ranges from 10 ppm to 5% by Volume
- CO2 Ranges from 3,000 ppm up to 100%
- Readily Field Replaceable Sensors
- Simple Field Calibration
- Single and Dual (H2S/CO2) Configurations

NEMA 4X Weatherproof Enclosure Options (316-SS or Painted Steel)

Detcon Model Series 1000 H2S and CO2 gas analyzers are designed to provide accurate and continuous measurement of target gas concentrations in natural gas treating plants, gas production wells and at custody transfer points along gas transmission pipelines. The application flexibility of this family of analyzer products is based on utilization of proven sensor technologies and the ability to customize according to the application. The result is a simple and economical yet powerful analytical tool offering capabilities equivalent to analyzer technologies costing much more.

www.detcon.com