GDS Corp

Gas and Flame Detection

Wireless Gas Detection Systems
Fixed Gas Detection Systems
Gas Sensors & Detectors
Flame Detectors
Display & Alarm Controllers
Process Monitors
Calibration Equipment & Supplies
Custom Systems

Industrial Gas Detection

GASMAX / TX Battery-Powered Wireless Gas Monitor

The GASMAX / TX single / dual channel wireless gas monitor combines the latest in ultra-low power microprocessor design, infrared sensor technology and ease-of-use features to deliver the most advanced wireless toxic and combustible gas monitor available. A menu-driven operator interface using magnetic keys enables power on/off switching and setup without opening the enclosure.

- Single or dual channel, local or remote Smart Sensors
- Third generation ultra-low power design for toxic and combustible gases
- Transmits all setup information to new C2/TX Wireless Site Manager Controller
- Compatibility mode for use with *Protector* Series Controllers
- Sealed enclosure, Power ON / Power OFF using only a magnetic wand
- Reliable frequency-hopping spread-spectrum radio for long distances
- 900 Mhz or 2.4 Ghz; 900 MHz power adjustable from 10 mW to 1 W
- Graphic display shows gas values, units, trends and alarm levels
- Security settings to lock critical setup and network parameters
- Fault supervision circuitry detects missing or failed sensors
- Non-intrusive, user-prompted calibration procedure
- Auto-recogntion of Smart Sensors
- Encrypted wireless network option

Gases
Hydrogen Sulfide
Methane
Propane
Sulfur Dioxide
Carbon Monoxide
Natural Gas
Ammonia
Chlorine
More...

New!
Ultra-Low Power
Infrared Combustible
Gas Sensor

GASMAX / TX with
Dual Local Sensors

New!
Encrypted transmissions option
for enhanced data security

New for 2014

95 / TX Wireless Alarm Station / Range Extender

The 95/TX Alarm Station / Range Extender is an integral part of the GDS Corp wireless gas detection system, providing common alarm relays and range-enhancing RF repeater capability in a single device.

- Monitor alarm status messages from up to 32 GASMAX/TX Wireless Gas Monitors
- Display screen shows “All Alarms Clear” or individual alarm information
- Four programmable SPDT alarm relays and one dedicated fault relay
- Available configurations include rated and non-rated strobe lights or horns
- 900 MHz or 2.4 Ghz radios; 900 MHz power adjustable from 10 mW to 1 Watt
- Magnetic keypad for non-intrusive operation in hazardous area
- Repeater mode selectable on channel-by-channel basis
- Typical range > 1 mile with 900 MHz radio modem

New for 2014

C2 / TX Wireless Site Manager Alarm & Display Controller

The new C2 / TX Wireless Site Manager is the heart of third-generation wireless systems from GDS Corp. Designed to monitor from 1 to 32 wireless GASMAX / TX gas detectors, the C2 / TX incorporates the latest features while retaining the reliability and cost effectiveness of previous generation products.

- Large LCD shows values, alarm status and user setup information
- 900 MHz or 2.4 GHz; 900 MHz power adjustable from 10 mW to 1W
- Optional Remote Access cellular or satellite modem with GPS location
- Alarm ACK doubles as “Push to Test” feature for locally connected alarms
- Channel information automatically uploaded from GASMAX / TX Monitors
- Magnetic keypad for non-intrusive operation in hazardous area
- Optional 802.11 b/g WiFi interface for local network access
- Operates from either +12VDC, +24VDC or 110/220VAC
- Optional data logging function with USB interface
- Eight programmable SPDT 5A alarm relays

Cellular / Satellite *Remote Access*

Wi Fi

Integrated ***ETHERNET***

CR / TX Remote Display for C2 / TX Wireless Site Manager Controller

The CR / TX Remote Display is a serially connected, full color touch-screen interactive display that provides real-time data on up to 32 wireless GASMAX / TX gas monitors. Using RS-485 MODBUS, the CR / TX continuously polls the C2 / TX Wireless Site Manager and displays channel values, alarm status, wireless battery voltage and other important system parameters. The CR / TX Remote Display will be available in 2H ‘2014.

SIteMAX II Rapid Deployment Gas Detection System

The *SiteMAX II Rapid Deployment* Gas Detection System combines the new C2 / TX Wireless Site Manager Alarm & Display Controller with the matching GASMAX / TX gas monitors and an integrated 12VDC solar power system to deliver a completely portable, self-contained wireless gas detection system for toxic and combustibles gases.

Gases
Hydrogen Sulfide
Natural Gas
Sulfur Dioxide
Carbon Monoxide
Methane
Propane,
More...

- Rapidly deploy up to 32 points of wireless toxic or combusitble gas detection
- Includes C2 / TX Wireless Site Manager and 4 GASMAX / TX monitors
- Solar power system designed to provide up to 5 days of ‘low sun’ capability
- Optional 2nd wireless radio for communications with remote DCS
- Available without tripod for fixed applications using customer-supplied 2” pole
- Class 1 Div 2 rated solar panel and charge controller with low-voltage shutdown
- Industrial quality portable tripod with extendable legs and tie-down points
- Optional rated and non-rated strobes and horns

Wi Fi

Integrated ***ETHERNET***

Cellular / Satellite *Remote Access*

GASMAX II Single / Dual Channel Gas Monitor

The GASMAX II Gas Monitor delivers the best in toxic & combustible gas detection technology, reliability and ease of use. Built-in dual channel electronics allow the GASMAX to support any GDS Corp sensor or any combination of one toxic and one combustible (bridge-type) sensor.

- High performance processor directly supports one toxic gas sensor and one combustible gas sensor
- Dual 4-20mA input for GDS-49 or GDS-50 sensors
- MODBUS, 3x alarm relays or isolated 4-20mA output
- High resolution graphic display shows values & trends
- Non-intrusive, easy-to-use prompted calibration procedure
- Power input 12V - 30VDC (with GDS-IR, 18-30VDC)
- Autorecognition of local Smart Sensors
- CSA Certified for Class I Div 1 Hazardous Areas

Gases

Hydrogen Sulfide
Methane
Propane
Sulfur Dioxide
Carbon Monoxide
Natural Gas
Ammonia
Chlorine
Phosgene
Benzene
Toulene
Mercaptans
Many more...

GASMAX II with Dual Local Sensors

GASMAX II with GDS-IR Infrared Sensor

GASMAX CX Single / Dual Channel Gas Monitor with Advanced Networking

The new GASMAX CX gas monitor from GDS Corp delivers quality, performance and advanced features for the most critical gas detection applications. Designed especially for situations where gas readings need to be transmitted in real time via a variety of communication options, the GASMAX CX includes dual 4-20mA outputs and built-in Ethernet port with MODBUS/TCP and built-in web server.

- Monitor toxic and combustible gases in one detector
- Non-intrusive, easy-to-use prompted calibration procedure
- High resolution color TFT display for easy recognition of alarm conditions
- Monitor readings, alarm conditions and modify settings via Ethernet
- Optional dual MODBUS and 4x SPDT 5A programmable alarm relays
- Dual 4-20mA input supports remote GDS-49 or GDS-50 sensors
- Fault supervision circuitry detects failed or missing sensor
- Security settings allow user to lock critical parameters
- Supports both local and remote Smart Sensors
- Standard Ethernet port with built-in web server
- CSA Certified for Class I Div 1 Hazardous Areas

Integrated
ETHERNET

New for 2014

C64 *PROTECTOR* 16/32/48/64 Channel Alarm & Display Controller

The C64 *Protector* Alarm & Display Controller is designed to monitor up to 64 analog, direct bridge, serial MODBUS or wireless inputs and provide relay contact, analog, ethernet or MODBUS outputs. The C64 features a QVGA color screen and advanced features that include built-in web server with on-line setup, direct connection to bridge-style sensors, data logging to SD cards and more.

- High resolution QVGA color LCD display with visual alarms
- Data from Analog, Bridge, Serial MODBUS, MODBUS TCP or wireless
- Four standard 5A SPDT alarm relays for A1, A2, FAULT and HORN
- MODBUS master & slave ports for redundant communications
- Built-in Web Server for remote monitoring / setup via Ethernet
- Optional sixteen channel programmable relay board
- Optional discrete relays boards; up to 264 total relays
- Off-line Windows® 7 programming and setup software
- CSA Certified for Class I Div 2 Hazardous Areas

Integrated
ETHERNET

Cellular / Satellite
Remote Access

Flexible Programming Options **Integrated Data Logging** **Multiple Controller "Mimic" Capability**

C1 *PROTECTOR* 8/16 Channel Alarm & Display Controller

The C1 *Protector* Controller is an ideal solution for monitoring up to 16 gas sensors or flame detectors. The C1's modular architecture supports wired or wireless inputs, dedicated relays and 4-20mA outputs. Standard MODBUS and optional Ethernet interface provide easy access from DCS systems or local area networks.

- High resolution LCD shows values, bar-graph and trend data
- Select input data from analog, direct bridge, serial MODBUS or wireless
- Optional discrete relay boards provide per-channel / per-alarm flexibility
- Supports GASMAX "IIx" and "ECx" 2nd generation wireless gas monitors
- Four 5A SPDT alarm relays for A1, A2, FAULT and HORN
- CSA Certified for Class I Div 2 Hazardous Areas

C2 PROTECTOR SERIES 2/4 Channel Alarm & Display Controller

The C2 Series Display & Alarm Controllers provide signal conditioning, display and alarm functions for two or four critical input variables. Input options include analog 4-20mA, digital, bridge-type or wireless.

- C2 *Quad Protector* Controller monitors four wired or wireless inputs
- C2 *Protector* Controller monitors two wired analog or bridge-style inputs
- Large LCD display shows values, bar-graph and trend data
- Magnetic interface for non-intrusive operation in hazardous areas
- Two programmable 5A SPDT alarm relays; up to 8 total with relay option board
- CSA Certified for Class I Div 2 Hazardous Areas

GDS-58XP Sample Draw Gas Monitor

The GDS-58XP Sample Draw System provides a safe and reliable way to measure combustible or toxic gases in locations where the installation of traditional diffusion sensors is not possible or recommended. The GDS-58XP includes a brushless DC sample pump, low flow indicator and convenient RUN/CALIBRATE valve.

- Draw sample from up to 500 ft / 150m
- Long life brushless DC sample pump with low flow monitor switch
- 4-20mA, MODBUS slave interface & 3X programmable alarm relays
- GASMAX II monitor for *all non-reactive toxic or combustible gases*
- Optional local AC power supply, strobe light or audible warning horn
- Designed for use in Class I Div 1 hazardous areas

Monitor Confined Spaces, Sumps, Air Inlet / Exhaust Ducts & Similar Hard-to Reach Hazardous Locations

GDS-58NXP Single / Dual Channel Sample Draw Gas Monitor with Ethernet

The GDS-58NXP Sample Draw System combines the new GASMAX CX Gas Monitor with the sample draw capabilities of the popular GDS-58XP. The GDS-58NXP supports both single channel and dual channel sensor capability with advanced networking features such as dual MODBUS slave ports and MODBUS / TCP data access.

- Draw sample from up to 500 ft / 150m
- Long life brushless DC sample pump with low flow monitor switch
- 4-20mA, 2x MODBUS slave interface & 4X programmable alarm relays
- Dual MODBUS slave interface for remote monitoring from two locations
- GASMAX CX monitor for *all non-reactive toxic or combustible gases*
- Optional local 110/220VAC power supply, strobe light or horn

New for 2014

Integrated
ETHERNET

Features New
GASMAX / CX

GASMAX EC Two-Wire Intrinsically Safe Gas Monitor

The GASMAX EC single channel gas monitor for toxic or oxygen deficiency applications delivers the latest in loop-powered gas detection technology. The GASMAX EC supports all GDS Corp toxic sensors, including oxygen, hydrogen sulfide, chlorine, carbon monoxide and more.

Gases
Oxygen
Chlorine
Carbon Monoxide
Hydrogen Sulfide
Hydrogen Cyanide
Sulfur Dioxide
Ammonia
Ozone
More...

- High resolution graphic display shows values & trends
- Two-wire, loop-powered gas detector for *all toxic gases*
- Non-intrusive, easy-to-use prompted calibration procedure
- CSA Certified for installation as Explosion Proof or Intrinsically Safe
- CSA Certified for Class I Div 1 Hazardous Areas

GDS-IR High Performance Infrared Sensor for HYDROCARBONS & CO_2

The GDS-IR Infrared Gas Sensor uses proven, reliable infrared sensing technology to detect dangerous levels of carbon dioxide or explosive levels of methane, propane and other hydrocarbons.

Gases
Methane
Propane
Isobutane
Pentane
Ethanol
Ethylene
Jet-A
Gasoline
Acetone
Xylene
MEK
CO_2
More...

- Reliable & rugged infrared sensing technology for harsh environments
- High speed response for critical applications (T50 < 3 seconds)
- Heated optics for reliable operation in high humidity or low temperatures
- Industry standard 4-20mA output for signal runs in excess of 500 meters
- Ten discrete fault output states for rapid troubleshooting
- CSA Certified for Class I Div 1 Hazardous Areas

Suitable for Use in SIL 2 Safety Systems

Five Year Warranty
12 Year Warranty on IR Source

GDS-49 Remote Sensor for TOXIC GASES

The GDS-49 two-wire toxic sensor transmitter provides a scaled 4-20mA current sink output suitable for long distance transmission to an appropriate Protector-Series Display & Alarm Controller or GASMAX gas monitor.

Gases
Oxygen
Chlorine
Carbon Monoxide
Chlorine Dioxide
Hydrogen Sulfide
Hydrogen Cyanide
Sulfur Dioxide
Ammonia
Ozone
More...

- Two-wire loop-powered 4-20mA output
- Non-polarized interface eliminates wiring errors
- Accepts any GDS Corp toxic or oxygen sensor
- Fault supervision circuitry detects failed or removed sensor
- Available without flame arrestor for highly reactive gases
- CSA Certified for Class I Div 1 Hazardous Areas

Install as *Intrinsically Safe* or *Explosion Proof*

GDS-50 Remote Sensor for COMBUSTIBLES & CARBON DIOXIDE

The GDS-50 Remote Sensor is a three-wire sensor transmitter designed to detect combustible hydrocarbons or carbon dioxide gas. The 4-20mA output is compatible with any device with input and built-in calibration capability.

Gases
Methane
Propane
Hexane
Butane
Pentane
ETO
CO_2
More...

- Three-wire DC-powered 4-20mA output
- Simple to install - no sensor voltage or balance adjusment required
- SmartIR Infrared Sensor for methane, propane, hydrocarbons (LEL)
- Carbon dioxide, 0-1000 ppm to 0-100% by volume
- Fully temperature compensated from -20˚C to + 50˚C
- Enclosure CSA certified for Class I Div 1 hazardous areas

Easy Setup - No *Voltage* or *Balance* Adjustment Required

SharpEye Flame Detectors

Spectrex SharpEye fire detection products are designed to the highest safety requirements for high risk industries and commercial applications. Fire detection is achieved by the SharpEye 40/40 Series Optical Flame Detectors, including Triple infrared (IR3), Multi IR, UV/IR, UV, IR and CCTV models for Ex hazardous areas and safe area applications.

SharpEye 40/40I Triple IR

- Multi-spectrum detection with maximum immunity to false alarms
- Detects 1 ft^3 gasoline pan fire at 215 ft in less than 5 seconds
- Five year warranty; suitable for use in SIL-2 (TUV) systems.
- FM, CSA, ATEX, IECEx, GOST-R, inmetro and MED (marine) approvals

SharpEye 40/40M Multi-IR

- Specifically designed for detection of hydrocarbon and hydrogen flames
- Selectable sensitivity to reduce zone crossover detection
- Multiple output options, including HART, relays, MODBUS & analog signals
- FM, CSA, ATEX, IECEx, GOST-R and inmetro approvals

SharpEye 40/40L, -LB UV/IR

- Detects hydrocarbon, hydroxyl, hydrogen, metal and inorganic fires
- Heated optics and secondary heater reduces condensation
- FM approved for Class I, Div 1 Hazardous Areas
- Five year warranty

SharpEye 40/40UFL Ultra-Fast UV/IR

- High speed response (< 20 mSec) with high immunity to false alarms
- Based on design used for military vehicle fire suppression systems
- FM, ATEX, IECEx, EN54-10 and CPR approvals
- Five year warranty

Flame Sources

n-Heptane
Kerosene
Gasoline
Diesel Fuel
Jet Fuel
Hydrogen
Methane
LPG
Polypropylene
Office Paper
Silane
Metals

Applications

Offshore Oil & Gas
Onshore Oil & Gas
Pipelines
Chemical Plants
Petrochemicals
Aircraft Hangers
Power Plants
Printing Facilities
Warehouses
Automotive Plants
Explosives & Munitions
Aerospace
Paint, Polymer & Glue

SPECTREX INC.

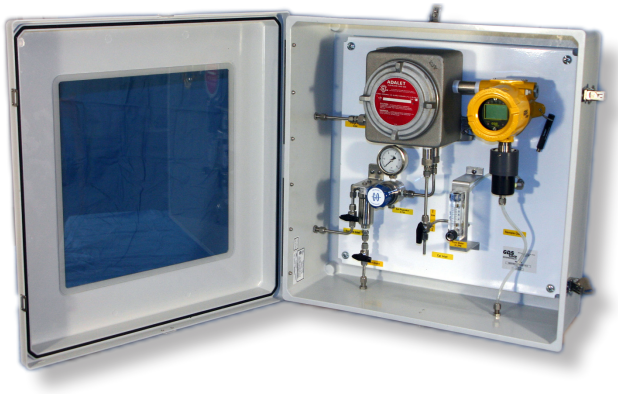
Open Path Gas Detectors for Combustible Hydrocarbons

The New SafEye Quasar 900 is an open path detection system for combustible hydrocarbon gases over distances up to 660 ft (200m) with heated optics to ensure high reliability in tough environments. FM, ATEX and IECEx approved and functionally approved by FM and tested per EN standards

- Detects methane and most common hydrocarbons, including ethane, propane, butane and propylene
- Built-in event log, stores last 100 events
- Detection range from 7 to 200 meters using three different models
- Fast connection to hand-held setup device for rapid diagnostics & maintenance
- Outputs include 4-20mA, HART and RS-485 MODBUS
- SIL-2 approved per IEC61508

GDS-68XP Process Monitor for Low Oxygen Applications

The GDS-68XP H_2S Monitor for Low Oxygen Applications uses sequencing technology to directly measure hydrogen, hydrogen sulfide, mercaptans or other gases in streams that contain little or no oxygen. By alternatively applying sample gas and clean purge air to the sensor, the GDS-68XP delivers longer sensor life and significantly reduces the amount of sample released to the atmosphere.



- Measurements intervals from 1 to 8 hours or 'on demand'
- Built-in low flow switch with multiple diagnostic outputs
- Reliable, low cost electrochemical sensor technology
- Automatic overrange detection protects sensor life
- Ethernet, analog and serial MODBUS output
- Sample draw configuration available
- High quality brushless sample / purge air pump
- Designed for use in Class I Div 1 hazardous areas

New for 2014

Integrated ***ETHERNET***

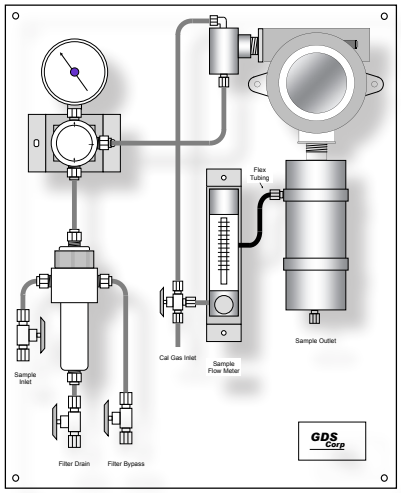
Features New **GASMAX / CX**

Applications:

Tracking H2S levels in natural gas pipelines
Verifying mercaptan-based odorant levels in natural gas distribution systems
Measuring hydrogen levels in anaerobic process streams
Early warning for H2S scrubber breakdown in biogas streams

GDS-78XP Process Monitor

The GDS-78XP is an application-specific system designed to continuously monitor a gas sample for hydrogen sulfide, carbon dioxide, combustibles and / or other toxic gases. Output options include 4-20mA current loop, multiple alarm-level-based relay contact closures, serial MODBUS interface and high speed Ethernet.



GDS-78XP with dual filter and GDS-IR sensor

- High performance GASMAX CX gas monitor with color display
- Sample conditioning options include dual membrane / coalescing filter
- Built-in flow meter provides visual confirmation of proper flow levels
- Advanced infrared sensors for combustibles and carbon dioxide
- Outputs include Ethernet, dual serial MODBUS and 4x alarm relays
- Designed for use in Class I Div 1 hazardous areas
- Panel mount or NEMA 4X enclosure

New for 2014

Integrated ***ETHERNET***

Features New **GASMAX / CX**

Applications:

Measuring oxygen levels in nitrogen or inert gas purge applications
Monitoring methane or hydrocarbon gas levels in process gas streams
Carbon dioxide monitoring

Calibration Gas and Gas Generators

GDS Corp Gas Calibration Kits provide a convenient and economical way to maintain optimum performance from a gas detection system. Available for over 40 different gases and concentrations, each kit contains a cylinder of calibration gas traceable to NIST standards, a fixed flow regulator, tubing, a GDS Corp sensor calibration cup and a convenient carrying case.

Gases include ammonia, carbon dioxide, carbon monoxide, hydrogen sulfide, hydrogen cyanide, isobutylene, methane, propane, oxygen, sulfur dioxide and many more.

Note: For highly reactive gases such as chlorine or chlorine dioxide, GDS Corp recommends the CAL 2000 gas generator.

The **Cal 2000 Calibration Gas Generator** provides unmatched versatility and accuracy for corrosive calibration gases. Field replaceable electrochemical generating cells provide accurate reference inputs for chlorine, chlorine dioxide, hydrogen, hydrogen cyanide, and hydrogen sulfide gas sensors.

The Cal 2000 is microprocessor controlled and offers automatic compensation for altitude and temperature along with field adjustable ppm and flow rate. The gas cells provide up to 50 times as much calibration gas as a disposable cylinder and do not degrade over time. The Cal 2000 is NIST certified for +/- 10% accuracy.

The **CAL 2000 LT** is an economical alternative for calibration of corrosive gas detection equipment. Available in pre-set flow-rates of 0.5 or 1.0 LPM, the CAL 2000 LT can be ordered with cells for chlorine, hydrogen, hydrogen cyanide and hydrogen sulfide in pre-specified concentrations.

The CAL 2000 LT is microprocessor controlled and has an LCD display allowing easy user access to information such as cell life remaining, battery status, gas concentration and flow-rate. The CAL 2000 LT can be easily upgraded to the CAL 2000.

Loop Powered Accessories

The GDS-56 Loop-Powered Indicator displays a 4-20mA signal in engineering units. Includes 30-minute trends and bargraphs. Readings up to 999,900 with trailing zeros.

The GDS-55 Loop-Powered Alarm provides a fail safe, completely isolated SPDT dry contact relay for switching AC or DC loads.

The GDS-51 Loop-Powered Isolator eliminates problems often encountered when terminating field current loops to control room instrumentation.

Solar Power for Gas Detection Systems

GDS Corp Solar Power Systems include a silicon nitride multicrystalline solar panel, solid state charge controller with automatic low voltage load disconnect, gelled-electrolyte storage battery (single or dual), aluminum battery enclosure, pre-wired circuit breakers and all the necessary interconnect cables and pole mounting hardware. “H” series includes system components rated for Class I Div 2 hazardous areas.

SP-1, SP-1H

- Provides one watt (80 mA) of DC power for up to five days of low sun conditions
- Sufficient to power a single loop-powered device

SP-3, SP-3H

- Provides three watts (250 mA) of DC power for up to five days of low sun conditions
- Sufficient to power a single DC GASMAX II gas monitor with cat bead or PID sensor

SP-5, SP-5H

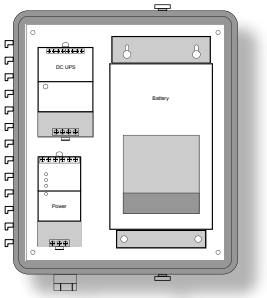
- Provides five watts (430 mA) of DC power for up to five days of low sun conditions
- Sufficient to power a wired or wireless gas detection system with wireless sensors

SP-12, SP-15

- Provides 12 watts (1A) or 15 watts (1.25A) of DC power for up to five days of low sun conditions
- Designed for larger systems with multiple strobes and warning horns.

Uninterruptible Power for Gas Detection Systems

The GDS Corp UPS-X family of uninterruptible power supplies are designed to provide a steady and reliable source of DC power for wired or wireless gas detection systems. The presence of a UPS increases the reliability of the system and eliminates sensor warmup delays that occur after short power outages.



- High efficiency design requires no active cooling
- Up to 10A at +24VDC (240 watts) for large systems
- Modular, rugged design suitable for industrial and marine applications
- DC-UPS design eliminates losses and power dissipation due to multiple conversions
- Single or dual AC power supplies for redundant input with automatic switchover

Custom Systems

GDS Corp designs and builds custom gas and flame detection systems for refineries, chemical plants, pipelines, waste treatment plants, offshore platforms and research facilities, from 16 points to 160 points and more. Contact your local GDS Corp representative for more information.

Reliable Gas Detection Products from GDS Corp

GDS Corp is a leader in fixed gas detection systems for personnel safety and equipment protection. Designed and manufactured in the USA, GDS Corp equipment delivers the latest in gas detection technology at competitive prices, including non-intrusive gas monitors and sensors, flame detectors, display and alarm controllers, auto-configuring remote display panels and a complete line of calibration accessories needed to maintain peak effectiveness and accuracy.

Utilizing the latest in industry standard wireless technology, GDS Corp offers a full line of robust wireless gas detection solutions that combine 'wire-like' reliability with low cost, flexible installation options.

Headquartered in Houston, Texas, GDS Corp offers worldwide distribution and support. Engineering and production facilities are centralized in our Texas location for rapid response to customer needs.

New products are constantly being introduced at GDS Corp. For the latest information, visit our Website at www.gdscorp.com. For additional information, please contact your local distributor or email us at info@gdscorp.com.

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GDS Corp products that are specified for use in hazardous areas have been tested and approved for use in such areas by nationally recognized testing laboratories.

GDS Corp
Gas and Flame Detection