Portable Gas & Flame Detection

Product Overview

Contents

Portable Gas Detection

With the acquisition of Detcon, Oldham, Simtronics, GMI and the gas & Flame activity of Scott Safety, Teledyne has become one of the largest manufacturers of gas and flame detection products. These global brands bring together over 100 years of industry experience across a wide range of innovative detection solutions. This adds significant adjacent strength to the Instrumentation Division of Teledyne a leading provider of sophisticated instrumentation, digital imaging products and software, aerospace and defense electronics, and engineered systems, providing a broader array of safety products and solutions, enhancing our relevance to customers worldwide.

Every customer scenario demands a different, customized approach, and Teledyne applies expertise in building the right plan for the right hazards, every time. Our complete portfolio and industry-leading solutions offer expert perspective and quality products you can rely on in the most critical situations. When it comes to superior value, efficacy, efficiency and service, the gas and flame detection team from Teledyne delivers like no one else.

Teledyne uses its global capability, manufacturing excellence and customer engineering to provide end-to-end gas and flame detection solutions for a wide range of hazards worldwide. With an industry-leading, comprehensive portfolio of products and services, our commitment to cross-platform integration provides protection for today and confidence for tomorrow.

Our products are sold through a world class system of knowledgeable distributors, manufacturers' representatives and sales subsidiaries. Our customer commitment does not stop at product delivery but encompasses ongoing services. From custom-designed solutions to unmatched technical support, our gas and flame detection solutions are backed by expert judgment and premier technology that you can count on in any emergency.

Portables
& Transportables

Protégé ZM

Zero Maintenance Single Gas Personal Monitor

- No Charging or Calibration Required
- Display Shows Life Remaining, Gas Readings or Both
- Inexpensive, zero maintenance device that will alert the user to potentially toxic environment.
- Zero Maintenance monitors let you focus on worker safety instead of focusing on your equipment
- 2 years of continuous operation means your monitors stay working in the field instead of sitting in the shop
- Hibernation Mode provides two years of service, on your schedule
- User determines if the monitors operate continuously 24 hours a day, or rest between jobs"

Gases Detected: H2S, O2, CO
Sensor Technologies: electrochemical
Run Time: 2 years; hibernate mode extends life up to one year on CO and H2S
Alarms: 95 dB audible, red LED visual, vibrating
Approvals: ATEX • CE • IECEx • CSA • INMETRO • EAC • IP66/67

Protégé SG

Reusable Single Gas Personal Monitor

- Smart, swappable plug and play sensors
- Supports 14 e-chem toxic sensors
- Monitor will automatically recognize sensor type and update gas label on display
- Automatically download necessary calibration parameters, no programming will be necessary
- Data Logging Event logger with 5000 events
- Replaceable Filter
- Compliance LED screen
- Long life, replaceable Lithium battery
- Multiple languages available

Gases Detected: HCN, H2S, CO, O2, O3, NO, NO2, PH3, SO2, NH3, CL2, CLO2
Sensor Technologies: Electrochemical
Run Time: 1.5 - 2 years
Alarms: 95 dB audible, LED visual, vibrating
Approvals: ATEX • CE • IECEx • CSA • INMETRO • IP66/67

PS200

Up to Four Gas Personal Monitor

- Auto Bump and Calibration Station (Accessory)
- Optional Internal Pump and Easy One Button Operation
- 80 Hour Run Time with Low Power Sensor

The PS200 Series combines quality, ruggedness and advanced technology in a user friendly, portable gas monitor. It is compact, lightweight, water resistant, extremely robust, and is certified to multiple international and regional standards.

The PS200 can measure any combination of LEL, O2, CO and H2S making it suitable for a wide range of personal monitoring and confined space applications

Gases Detected: LEL, H2S, O2, CO
Sensor Technologies: electrochemical, catalytic, infrared.
Run Time: 14 hours, 8 hours (pumped)
Alarms: highly visible flashing LED, piercing >90dB audible
Approvals: ATEX • CE • IECEx • cCSAus • INMETRO • MED

PS500

Up to Five Gas Personal Monitor

- Auto Bump and Calibration Station (Accessory)
- Over 15 Plug-&-Play Smart Sensors to Choose From Including PID for VOCs

PS500 can be tailored to detect up to five gases and is particularly useful in noisy environments, featuring a piercing 95dBA alarm. An optional internal pump allows for pre-entry checking. PS500 features a high-impact resistance case and on-board data logging for calibration certificates, data management and event logging.

Gases Detected: LEL, H2S, O2, CO, CO2, SO2, CL2, NH3, NO, NO2, PH3, VOC, C6H6, dual tox CO/H2S
Sensor Technologies: electrochemical, catalytic, PID, NDIR
Run Time: 12 hours min with pump - rechargeable NiMH or 3 AA alkaline
Alarms: visual 360º light bar, piercing 95 dB audible, TWA, STEL, low battery
Approvals: ATEX • CE • IECEx • UL • MED

Applications suitable for different Combustible Sensor Options			
Applications	**Standard Filter**	**Enhanced Filter**	**Low Power**
	Detects most Combustible Gases	Enhanced resistance to H2S and Silicon Poisoning	Improved Battery Life (up to 80 hours)
Water Industry Clean Water	✔	✔	✔
Water Industry Waste Water	✔	✔	✔
BioDigester High H2S	✔	✔	✘
Bio Digester PPE	✔	✔	✔
TELECOMS	✔	✔	✔
Gas Welding/Brazing (acetylene)	✔	✔	✔
Gas Welding/Brazing (Propane)	✔	✔	✔
Refining PPE	✔	✔	✔
Petrochem Chemical >C5 HC's PPE	✔	✔	✘
Petrochem (Aromatics)	✔	✘	✘
Petrochem Eco Fuels (alcohol) Tank farm	✔	✘	✘
Gas Transmission	✔	✔	✔
Gas Storage	✔	✔	✔
Gas Distribution	✔	✔	✔
Oil Exploration	✔	✔	✔
Oil Exploration High H2S *	✔	✔	✘
Tank Cleaning **	✔	✔	✘
Solvent Recovery (Aliphatic)	✔	✘	✘
Solvent recovery (Aromatic)	✔	✘	✘
Power Generation Electrical	✔	✔	✘
Steel Works Steel Works Blast Furnace	✔	✔	✘
Steel Works Steel Works soaking pits & Reheat	✔	✔	✘
Brewing	✔	✔	✔
Distilling	✔	✘	✘
Heat Treatment (carburising/nitriding)	✔	✔	✘
Certification Gas Groups ATEX	ATEX IIC	ATEX IIC	ATEX IIB
Certification Gas Group U/L	ABC & D	ABC & D	C&D

GT-Fire

The GT-Fire is a dedicated hand-held methane detection meter specialized for the fire industry. This user-friendly meter has an ergonomic design coupled with a rugged polycarbonate construction that ensures durability and ease of operation as standard. The GT-Fire allows leak detection to be conducted for flammable (PPM & LEL) gases as well as Carbon Monoxide (CO), Oxygen (O2), and Hydrogen Sulfide (H2S) should this be required. The GT-Fire enables firefighters to conduct leak detection investigations themselves without the need for specialized PPM detectors, whilst eliminating potentially frustrating periods of downtime waiting for support from gas engineers.

- User-friendly instrument with simple interface
- Ergonomic design that is easy to operate
- Visual and audible assistance to support investigation
- PPM & LEL flammable gas ranges for leak detection
- Manual and automatic datalogging
- Loud audible and high visual 'ticker' (Geiger) on ppm range
- Integral flashlight
- Rugged polycarbonate case, sealed to IP54

Gases Detected: O2, CO, H2S, dual tox CO/H2S, methane (ppm, LEL, % Volume)
Sensor Technologies: electrochemical, catalytic, semiconductor
Run Time: 8 hours: 3 'C' type batteries – LR14 alkaline or rechargeable
Alarms: high visibility LEDs, 85 dB audible
Approvals: CSA • UL

GT

1 Instrument, 7 Applications

- Auto Bump and Calibration Station (Accessory)
- Leak detection from PPM to Volume gas with ultrafast ppm response

GT Series is designed for the gas industry, satisfying all the needs of service technicians within a single unit. Seven modes of operation include: leak test, confined space entry, barhole testing, carbon monoxide, purge, sniffer and pressure leak tightness. Features include data logging, integral flash light and geiger on ppm range.

Gases Detected: O2, CO, H2S, dual tox CO/H2S, methane (ppm, LEL, % Volume)
Sensor Technologies: electrochemical, catalytic, semiconductor, thermal conductivity, pressure transducer
Run Time: 8 hours: 3 'C' type batteries – LR14 alkaline or rechargeable
Alarms: high visibility LEDs, 85 dB audible
Approvals: ATEX • CE • IECEx • CSA • UL

Gasurveyor 500

Gas Standard Portable Monitor

- Auto Bump and Calibration Station (Accessory)
- Multiple Modes Including: Combustible Gas Indicator/ Confined Space Monitor/Purge/Sweep

Offering highly accurate and reliable instrumentation in an extremely robust, anti-static case, the Gasurveyor 500 Series measures combustible gases (ppm, %LEL, %Vol) in many applications and optionally O2, CO and H2S. Features include configurable operation, auto ranging, internal sample pump and data logging.

Gases Detected: CO, H2S, combustible (ppm, LEL, % Volume), O2
Sensor Technologies: electrochemical, catalytic, semiconductor, thermal conductivity
Run Time: 15 hours 4 'D' size alkaline or 9 hours rechargeable battery pack
Alarms: highly visible flashing LED, typically 85dB audible @ 1m
Approvals: ATEX • CE • IECEx • CSA • UL

Gasurveyor 700

Ensuring compliance

- GPS & tablet softwares
- Leak detection from PPM to Volume gas

Utilising the latest infrared gas detection technology in a robust and reliable design, the Gasurveyor 700 (GS700) is a highly configurable instrument with leading performance and a user-friendly interface which makes it the perfect choice for all gas utility applications. Intelligent data-logging functionality together with optional GPS mapping simplifies data gathering. Our cloud based Instrument Management System improves fleet management by providing access to field usage reports, calibration history, investigation mapping and many other bespoke reports; making it easier for our customers' to demonstrate compliance.

Gases Detected: methane (ppm, LEL and %vol) , O2, CO, H2S
Sensor Technologies: electrochemical, semiconductor, infrared
Run Time: 15 hrs Alkaline, 20 hrs rechargeable
Alarms: 360o Highly visible flashing LED, sounder ~ 90 db at 0.3 m
Approvals: ATEX • CE • IECEx • CSA

ShipSurveyor

Fully MED certified

- Ability to enter up to 300 unique user identified location areas
- Dual mode operation: Confined Space Monitor (CSM) or Combustible Gas Indicator (CGI)

A solution for all your safety monitoring and inerting marine application requirements. With 8 models to choose from, this extremely versatile instrument complies with international marine regulations for Confined Space Monitoring, Inerting, Pre-entry Testing, Tank Cleaning and many other marine applications in vessels such as LNG / LPG Tankers, Oil Tankers, Fruit Carriers and Refrigerated Cargoes.

Gases Detected: O2, CO, H2S, CO2, methane (ppm, LEL, % Volume)
Sensor Technologies: Infrared (IR) technology for inerting / purging operations
Battery Life: 20 hours alkaline or 8 hours rechargeable
Alarms: Highly visible flashing LED's on display panel - Sounder in excess of 80dB(A), typically 85db(A) @ 12in.
Approvals: ATEX • CE • IECEx • MED

OXYGAS 500

A combination instrument for your Leak and Purging / Inerting operations

- Directly interface with the auto test calibration units
- Integral pump

The Oxygas 500 compliments the Gascoseeker 500 with a similar performance, measuring % LEL and % volume flammable hydrocarbons, but with the addition of oxygen for either gas/air or gas/nitrogen/air purging. The Oxygas 500 has the following additional features; automated zero during start-up, manually selectable purge mode. The Oxygas 500 is easy to use with very simple training, as the operation of the instrument follows the operation of the purge cycle. The rugged design allows the Oxygas 500 to be used in harsh environments. The instrument is also fully compatible with our range of calibration software and equipment.

Gases Detected: O2 and flam LEL and %vol
Sensor Technologies: Infrared (IR) technology for inerting / purging operations.
Battery Life: 15 hours Alkaline or 9 hours rechargeable at 20°C
Alarms: indicates gas concentration increase in ppm range via the increased rate of sounder pulse (Oxygas P-500 only)
Approvals: CE, ATEX, IECEx, UL

BM 25/BM 25W

Infrared gas detector

- Network up to 30 Wireless Devices (up to 1 km/.62 Mile Line of Sight)
- Intrinsically Safe Trickle Charger For Long-Term Monitoring In Classified Zones

BM 25 is ideal for mobile or temporary work applications, team protection, area surveillance or locations where fixed detection systems are not suitable. Features include STEL and TWA values, data logging of four months or more and is compatible with the MX 40 controller. There are 16 possible wireless channels available to the BM25 so you can have 16 separate Networks in the same area with up to 30 instruments per Network. Self-healing wireless Mesh Network ensure robust plant operation

Gases Detected: toxic, combustible, O2, CO2, VOC
Sensor Technologies: electrochemical, catalytic, infrared, PID
Battery Life: NiMH up to 170 hours operating time, 135 hours in wireless mode
Alarms: ultra bright LED beacon visible 360 degrees, 103 dB @ 1 meter, relays
Approvals: ATEX • CE • IECEx • CSA • INMETRO • EAC

Docking
Stations

Introduction to Docking Technology

To complement the Personal Surveyor and Gas Surveyor product ranges; Teledyne Gas & Flame Detection have developed a range of compact, robust and easy to use docking stations which provide customers with the confidence and assurance that their instruments will operate safely and effectively within the environment or application of use.

Automatic Bump & Calibration (ABC) Station – PS200

Calibration Station

- Simple user interface
- Full bump, calibration and charging options
- Stand-alone, PC and ethernet options
- Robust construction
- Ability to charge instrument

Automatic Bump & Calibration (ABC) Station – PS500

Calibration Station

- Simple user interface
- Full bump, calibration and charging options
- Bump/calibration results storage
- Robust construction
- Stand-alone, PC and ethernet options

Protégé ZM

Portable Test Station

- Bump, Calibrate, Program and Hibernate up to four Protégé ZM monitors at once
- Automatically configure monitors during testing
- Intuitive to use with simple two button operation
- Dedicated Pass/Fail LEDs for each test bay report results

Protégé ZM

Stationary Test Station

- Bump, Calibrate, Program and Hibernate up to four Protégé ZM monitors at once
- Automatically configure monitors during testing
- Intuitive to use with simple two button operation
- Dedicated Pass/Fail LEDs for each test bay report results

Protégé SG

Master Dock II

- Table top portable unit
- Connect up to 10 units together
- Bump, calibration test and programming
- Touch screen user interface
- Auto sensing sensor type and adjust display
- Compatible with Protege Software
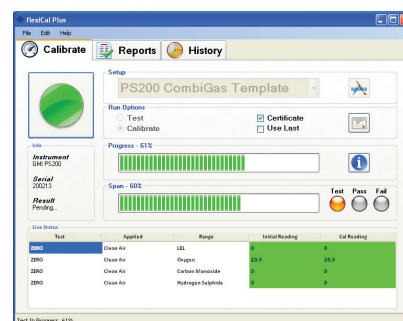
Software
Stations

Data Driven Management

Data Driven Management enables business to utilise real data from their own organisations to shape business and process deScisions, without estimation and guesswork. The ability to harness the power of everyday field data to improve business performance ensures that organisations can focus on their own business, leaving the management of Gas Detectors to Teledyne Gas & Flame Detection.

FlexiCal Plus

Test and Calibration Software

- Automatic or Manual Calibration
- Results Storage
- Instrument History
- Report Generation
- Internet Updates
- Display Real Time Results
- Gas Cylinder Tracking
- Generation of Cal Certificates
- Digital Signatures

FlexiCal Plus is a Windows™ based software package that allows customers to Test and Calibrate GMI's full range of portable instruments (PS1, PS200, PS500, GT Series, Gasurveyor) to comply with relevant legislation. All GMI portable instruments have two-way communications and the FlexiCal software can be configured to test and calibrate either manually or automatically. The user can specify parameters such as gas type, concentration and pass or fail criteria. Results are stored automatically on a PC or laptop. A test/cal certificate can then be produced after successful completion if required.
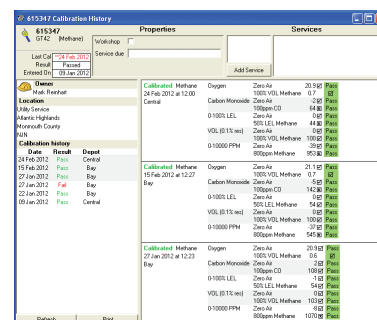
FlexiCal IMS

Instrument Management System Software

- Enables Remote Fleet Management of Equipment
- Automatic Calibration and Data Collection
- Issue Reminders Automatically When Calibration is Due
- Maintain Calibration Records Securely
- Generate Reports on Instrument Fleet Status

Instrument Management System (IMS) is a Microsoft Windows™ based software package used to automate the management of multiple GMIportable gas detectors. IMS helps ensure that the GMI portable instruments remain usable in field operations for as long as possible, knowing that they are functioning correctly without returning them to the workshop for routine checks. IMS provides System Managers with useful information on instruments including those that are overdue for testing or instruments that have not been successfully tested.

The Protege Application Software is installed on your business network, meaning it is located behind your firewall.
The security of your data is controlled by your own business, ideal for organisations which operate on a closed system policy (preventing access to the cloud).

Protégé SG application software

Portable Gas Detection Suite

Recent alarm list tracks all units which have alarmed, including alarm type, installed sensor, values etc.

Alarm trends display alarm count within a specific time period.

Monitors which need to be calibrated are centrally displayed. Any unit which is overdue is highlighted.

See all monitors within your internal network for remote management of monitors

See all connected docking stations within the fleet

Highly configurable software interface to display the information you need.

Master Dock II. Manage your fleet.

The Protégé MasterDock II (MD II) is an expandable, smart docking station that is compatible with the complete line of Protégé portable monitors. The device features an intuitive touch screen interface and can accommodate up to six gas bottles simultaneously. Up to 10 of the docking stations can be networked to bump, calibrate or charge 10 identical monitors or any combination of the Protégé family of monitors simultaneously.

EASY TO USE
- Intuitive touch screen GUI
- Universal mounting design
- One button calibration and bump
- Ergonomic ID design
- Graphic LCD – multi-language
- LED status indicators
- Durable and reliable
- Data download and diagnostics

ENHANCED CONNECTIVITY
- MasterDock II connects via Ethernet
- Directly to PC
- Premises intranet
- Remote TCP/IP connection via VPN
- MasterDock II can be used on site, H&S Manager or alternative user can be in an office or remote location
- Capbility to bump / calinbrate & configure instruments remotely across all MasterDock II and fleet.

PLATFORM TECHNOLOGY
- Connects up to 10 stations
- Connect multiple gas bottles with multiple gases
- Interchangeable cradle
- Smarter OS
- Monitor diagnostics
- Automatic bump and calibration
- Data management

TELEDYNE
GAS AND FLAME DETECTION
Everywhere**you**look™

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