Lauper Hausmesse Murten
5th-7th of September 2023

By Pierre Meyer
Sales Director Dach Region

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

Who we are

Protecting lives, that's our business.

For companies that demand the most reliable gas and flame detection solutions, Teledyne offers more than 100 years of proven experience in industries as diverse as oil & gas, food & beverage, marine and public utilities. Always sensing safety, everywhere you look, Teledyne's global portfolio of products and safety solutions are unquestionably first-in-class

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.

Over 20 years Collaboration with Partner Lauper Instruments in Switzerland.

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook®

Our Global presence

● Sales
● Manufacturing
● Service
● Product & Marketing
● Training

Dortmund, Germany

Milton Keynes, UK

Renfrew, UK

Arras, France

Aubagne, France

Cypress, Texas, USA

Shanghai, China

Singapore

Mumbai, India

Our brands notoriety on the market (EMEA & Asia)

TELEDYNE OLDHAM SIMTRONICS
Everywhere**you**look™

TELEDYNE GAS MEASUREMENT INSTRUMENTS
Everywhere**you**look™

TELEDYNE DETCON
Everywhere**you**look™

- N°1 brand in France for Gas Detection

- Well known all over Europe, CIS countries, Africa, and Asia

- Known in Middle East in the commercial applications (kitchens)

- General purpose equipment (gas detectors, stand alone monitors and controllers)

- High End products (gas detectors, flame detectors, controllers, analyzers) , especially for the Oil& Gas, Nuclear and Defense industries

- Strong sales and service coverage in Europe & Africa

- N°1 brand in the UK for portable Gas Detection (Utilities)

- Well known all over Europe,

- Low but growing M/S in the Middle East

- Portable Gas detectors for Utilities («Bricks») and portable gas detectors for Industrial Safety

- Strong sales and service coverage in Europe

- Well known in the Middle East, CIS countries and Asia

- Was not known in Europe/Africa for lack of sales people and certification

- High End products(gas detectors and controllers), especially for the Oil& Gas industries

- Strong in Wireless solutions

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

Pharmaceutical Industry

Thermal & Nuclear Power Stations

Natural Gas & LPG

Boiler rooms

Marine

Steel

Food & Beverage

Parking & Tunnels

Petrochemical

Freezing

Water

Brewing

Automotive

HC Refineries & Storage

Aviation

And many more…

The most extensive range on the market

Point Infrared LEL & CO2 Detection

Toxic & Catalytic LEL Detection

Wireless & Perimeter Monitoring

Universal gas detector

Portable gas detection and measurement

Open Path LEL & Toxic Detection

Flame detection

Control Solutions

Fire & gas systems

Portable & Stand alone monitor

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook

Fixed Gas Detectors

OLCT 10N

CPS 10

CTX 300

OLCT 100

DG Series

OLCT 80

OLCT 60

OLCT 710

700 Series

iTrans 2

Spyglass

Meridian

GD 10

GD1

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

Flame Detectors
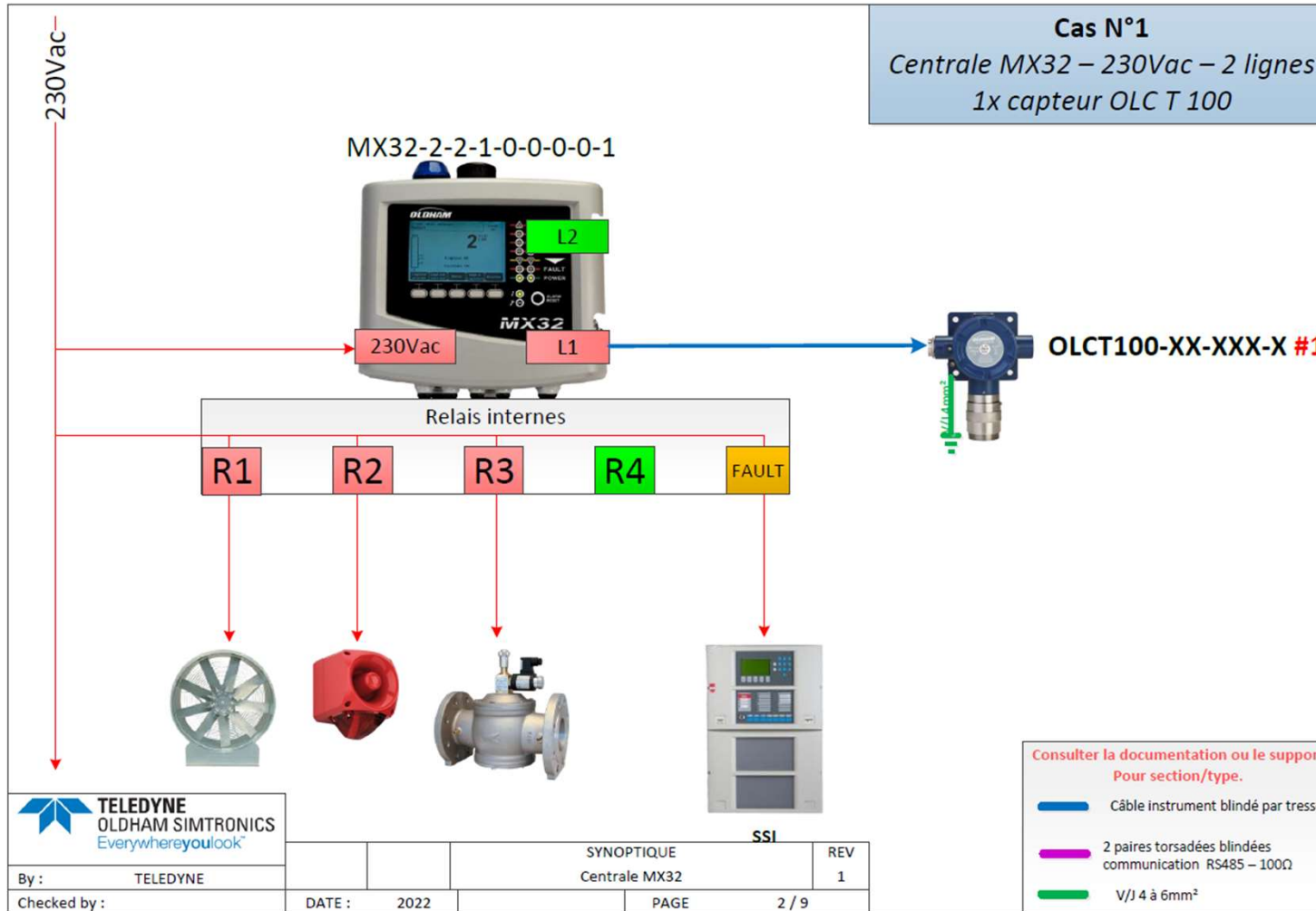
DF Series IR3 & UV/2IR

Series 40
UV & UV/IR
IR3 &

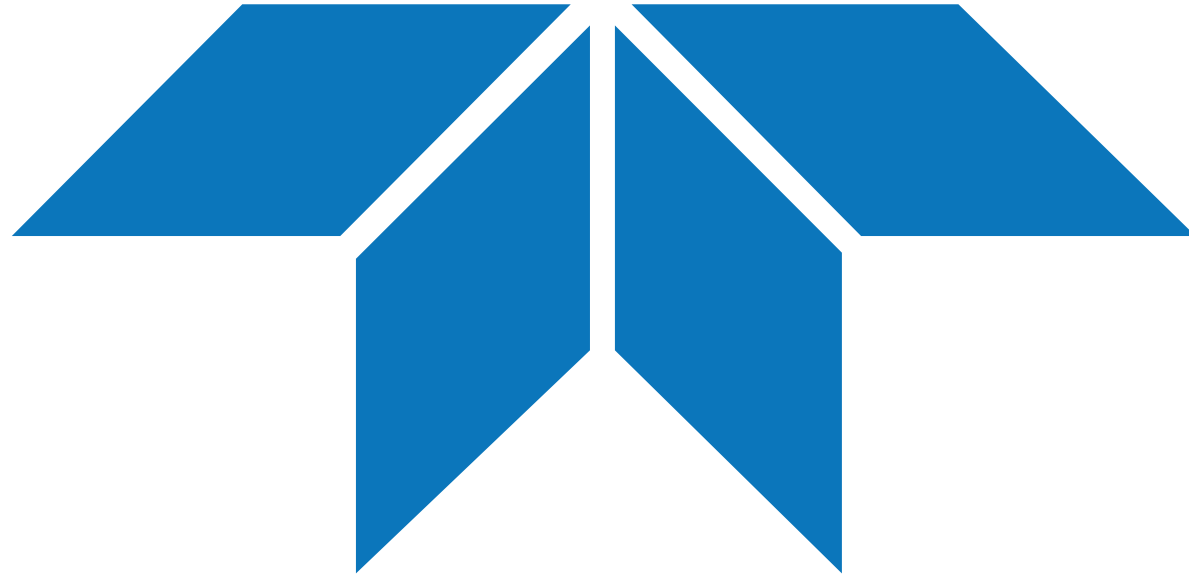# Teledyne Gas & Flame Detection

Highest Reliability IR Detection

Example of Configuration

Highest Reliability IR Detection

TELEDYNE
GAS AND FLAME DETECTION
Everywhere you look*

GD10P

The GD10P has been designed to provide an effective response to the detection of gas hazards in a wide range of industrial environments

Unique infrared gas detectors that utilize silicone based solid-state infrared sources.
Complete optomechanical design and construction provides stability for achieving an ultra fast speed of response and providing unparalleled service life and detector stability, thus saving on maintenance and service costs.
Available calibration for Methane Gas, CO2 or any of 16 other combustible gases.

Video of GD10P
https://youtu.be/mpu8AZqrHCQ?si=ymPWuF1wni4Gpdub

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook

GD10P
Combustible & Carbon Dioxide Detection

- Combustible:

  - Acetylene, Benzene, n-Butane, Cyclohexane, Ethanol, Ethylene, Hexane, Methane, Methane (Biogas), Methanol, Pentane, Propane, Propene, Styrene, Toluene,

- Carbon Dioxide (CO2)

GD10P

Highest Reliability IR Detection

- Durable, accurate, fast
  - Provides for continuous monitoring & accounts for environmental changes and device drift
  - Maintains highest accuracy of detection for the life of the unit
  - No recalibration required
  - Monitors & accounts for all changes in optical path
  - Early dirty optics warnings

GD10P Specifications Overview

- Gases Detected: Acetylene, Benzene, Carbon Dioxide, Cyclohexane, Ethanol, Ethylene, Hexane, Methane, Methane (Biogas), Methanol, n-Butane, Pentane, Propane, Propene, Styrene, Toluene

- Detection Method: IR- absorption, dual wavelength, dual path

- IR-Source: Solid state IR source, 50Hz flash

- Dimensions: 264 mm L x 104 mm W x 106 mm H (10.4" x 4.1" x 4.2")

- Weight: Approx. 2.9kg (6.4 lbs.)

- Standard Output Signal: Current source 4-20 mA, max. load impedance 500 Ohm

- Housing Material: Stainless steel SIS2343 (ASTM 316)

- Operating Temperature Range: -40°C to +65°C (-40°F to +149°F)

- Storage Temperature Range: -40°C to +70°C (-40°F to +158°F)

- Operating Humidity Range: 100% RH

- Ingress: IP66/ IP67 DIN 40050

- Power Supply: 24 V DC, range 18-32 V DC

- Power Consumption: Approx. 3.5W

GD10P Keys Points

- Quick response to detected gases.

- Fastest IR point detector on the market

- High IR source flash rate for improved stability & speed of response.

- Superior long-term performance compared to filament lamps

- Allows for the tuning out of minor or short duration detection events, in applications where there could be minor leaks
  - Resulting in lower nuisance alarms

- Ideal for speed critical applications
- Over 20 years LifeSpan, first one's in service 1990 still runnir
- Great may Best Cost of ownership ration in the market.

GD10P More Detailed

GD10P

Unmatched Optical Stability Eliminates Field Calibration

- Dual wavelength, dual path, solid state IR source
  - Extremely stable output, does not degrade like a filament
  - 5 year warranty on GD10P, 15 year warranty on IR sources
  - Typical life span +20 years (in service since 1990)
  - Three factory calibrated temperature curves: -30°C, +20°C & +55°C give high temperature stability
- All optics mounted on a single metal platform
  - Individual measurement, reference sources, and detectors
  - High mechanical stability
- Monitors and compensates for changes to the optical path

GD10P
Durability

- Independently heated mirror and lens
- Low power consumption reduces load on power supply or UPS
- High performance in rough environmental conditions
- Integral termination compartment for improved preventative maintenance
- Dual layer weather protector easily removed for cleaning
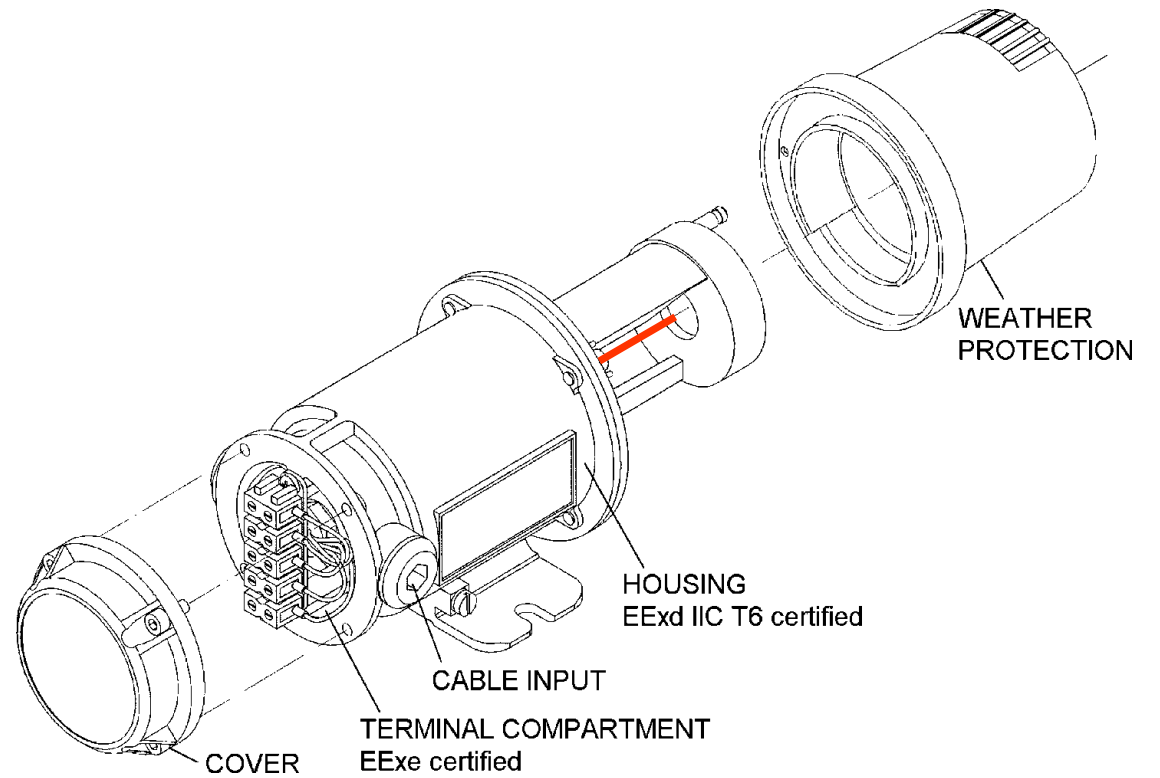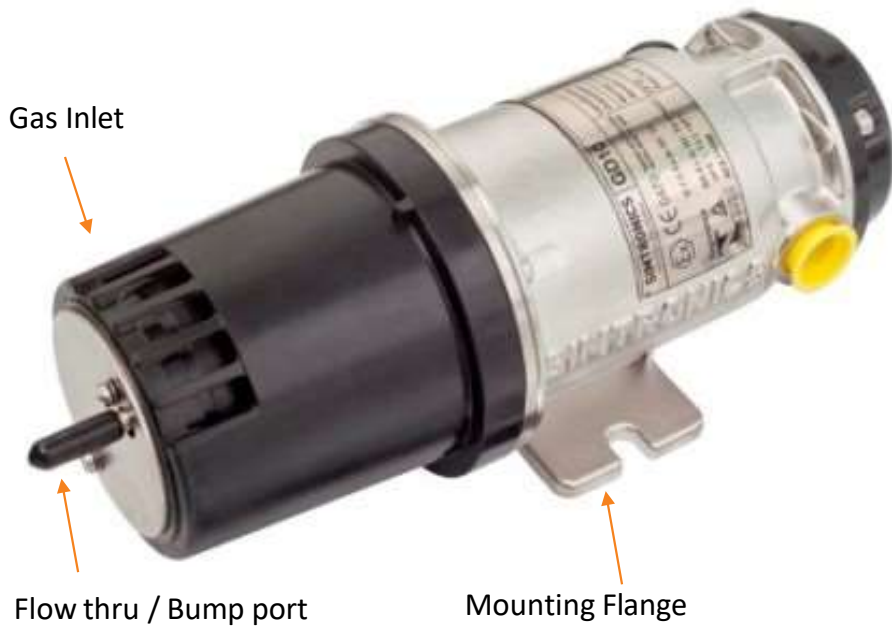- Sapphire lenses

GD10P

Quick Response

- Quick response to detected gases
    - Fastest IR point detector on the market
    - Ideal for speed critical applications
- High IR source flash rate for improved stability & speed of response.
- Superior long term performance compared to filament lamps
- Allows for the tuning out of minor or short duration detection events, in applications where there could be minor leaks
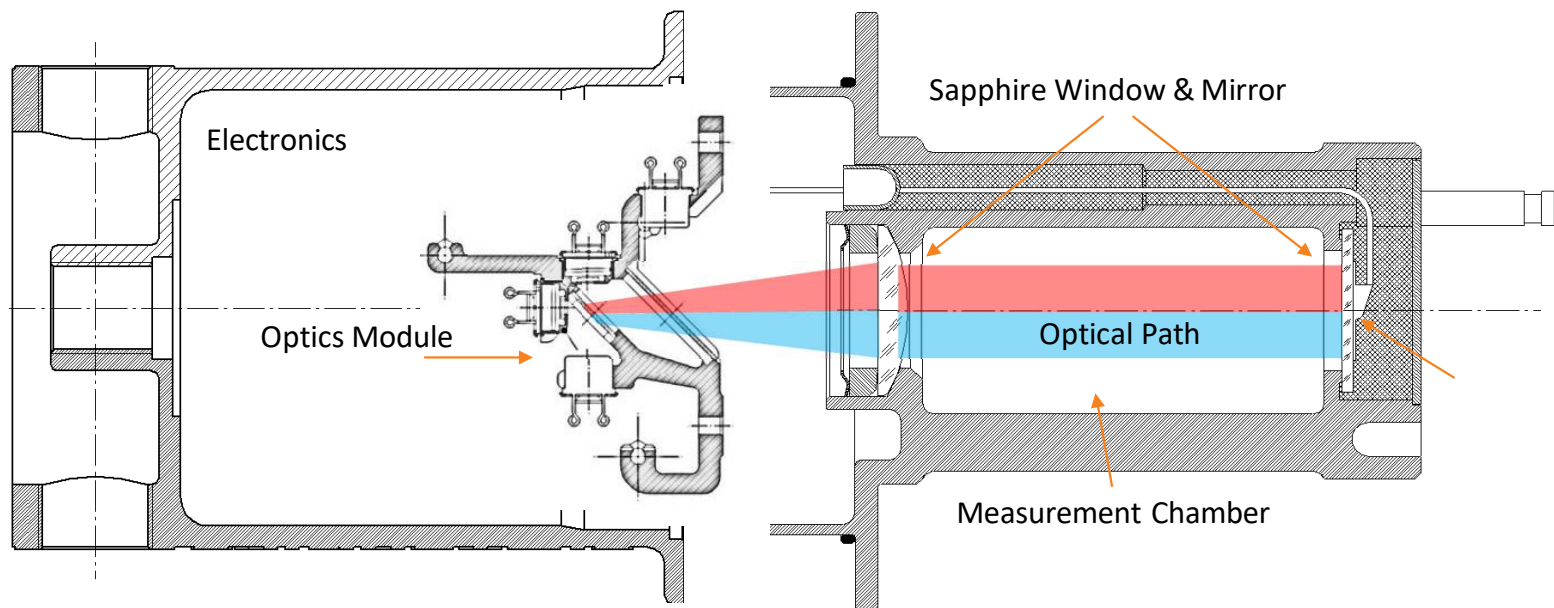   - Lower nuisance alarms
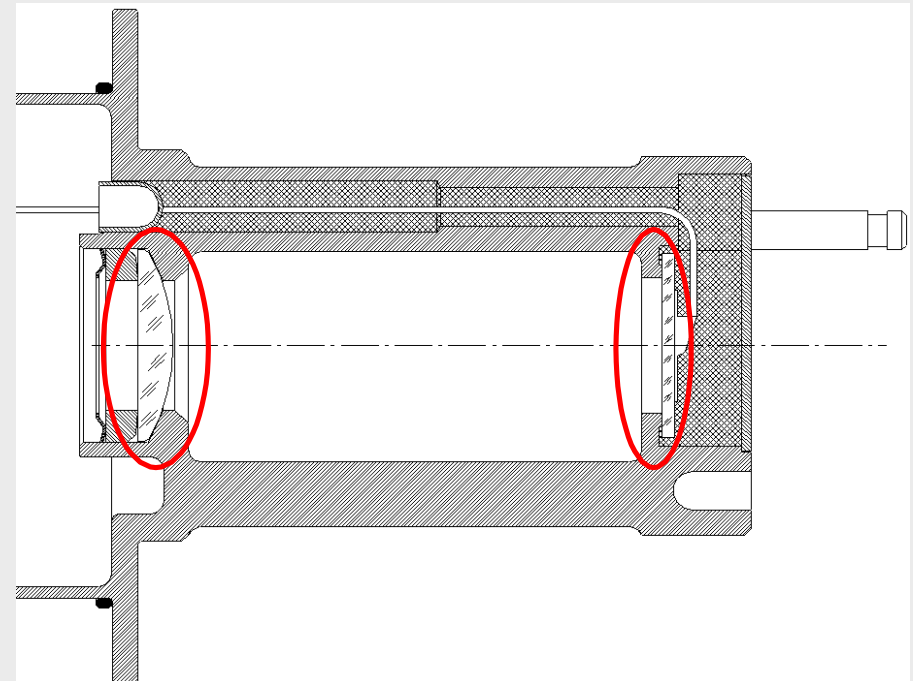
GD10P

Components

Gas Inlet

Flow thru / Bump port

Mounting Flange

WEATHER PROTECTION

HOUSING
EExd IIC T6 certified

CABLE INPUT

TERMINAL COMPARTMENT
EExe certified

COVER

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

GD10P

Components

Electronics

Sapphire Window & Mirror

Optics Module

Optical Path

Measurement Chamber
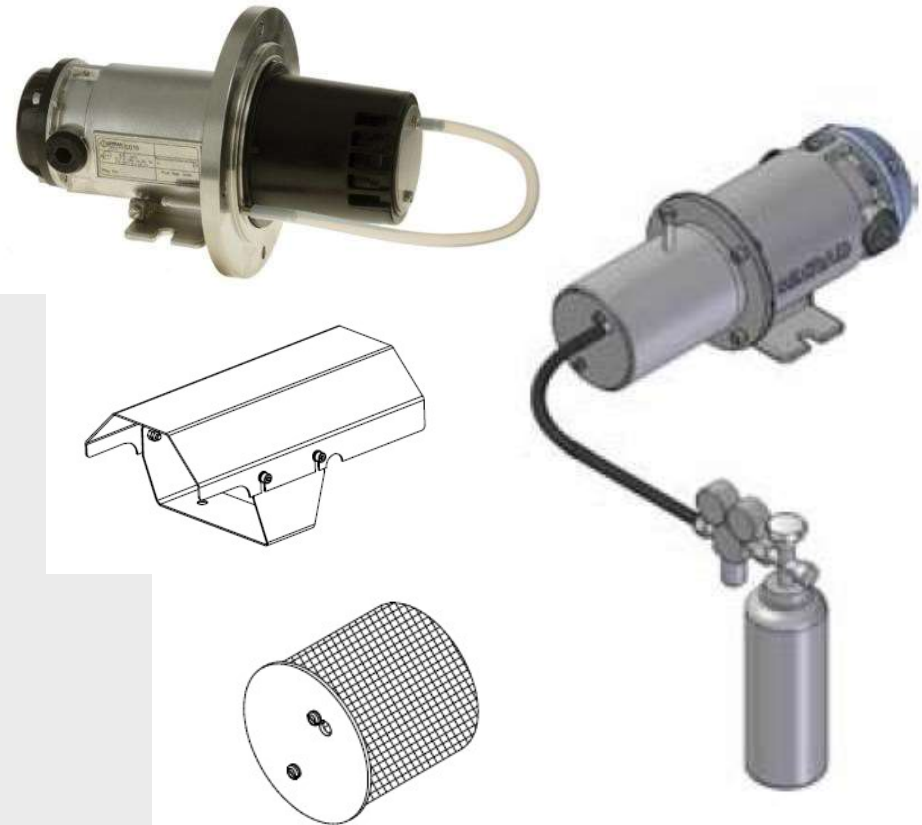
GD10P

Components

- Sapphire lens and mirror covering
  - Extremely durable
  - Only diamonds are harder
- Independently heated lens and mirror
  - Inhibits optics path fogging
- Early optics contamination warning
- Open design
  - Allows easy cleaning
  - Allows drainage from weather / washdown

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook

GD10P

Accessories

- Duct Mount Flange
- Flow Thru / Bump Test housing
- Mosquito Mesh
- Sun Shield (2) Standard & vertical mounting
- Pipe Mounting Adaptor

GD10P

Target Markets & Applications

FPSO/ FSO/ MOPU
Marine/ Jack up Rigs
Oil & Gas Offshore Drilling Rigs
Chemical and Petrochemical Plants
Waste Disposal
Gas Turbines
General Industry

Manufacturing Video
Manufacturing InfraRed Gas Detector -
GD10 Line - YouTube

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook°

Simtronics GD10P

Optional Display

- Comes in two varieties
  - 4-20mA loop powered
    - GD10P-Display-Alu-CSA
    - GD10P-Display-SS-CSA
  - With 2 relays & 4-20mA retransmission
    - 8080RR-A-07-E1-MM-00 (Aluminum)
    - 8080RR-T-07-E1-MM-00 (Stainless Steel)
- Epoxy coated aluminum or stainless steel
- Class I, Division 1, Groups B, C, D
- 4 digit LED display

GD10PE

Extended Pathlength

- Lower Measuring Ranges:
  - 0-20 %LEL methane
  - 0-5000 ppm ethylene
- Designed for Ventilation / Exhaust Ducts
- Extended Temperature Range 85 C / 185 F
- Probe Length: 653.5 mm / 2.14 ft / 25.73 in

GD10P

Target Markets

- Speed of response is critical

- Minimal maintenance is ideal

- Harsh environmental conditions are present

- Process is fouling traditional gas detection

- Calibration gas is difficult to obtain

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook
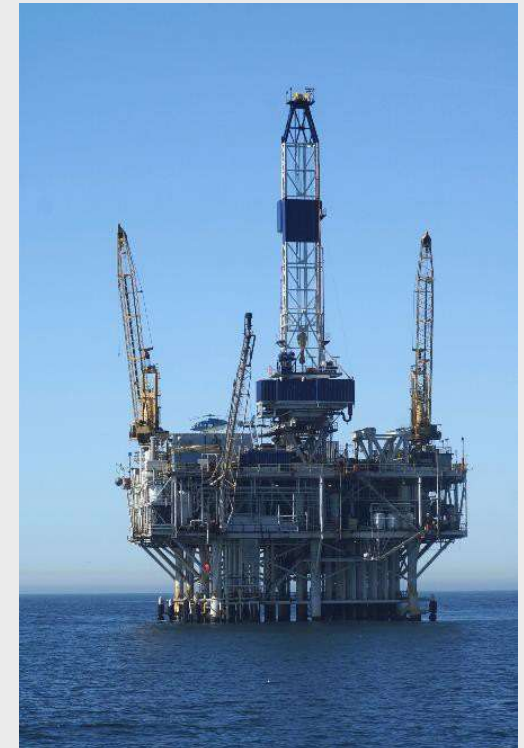
GD10P

Applications

- Any Rugged, Difficult, or Low Maintenance Area
  - FPSO/ FSO/ MOPU
  - Marine/ Jack up rigs
  - Oil & Gas offshore drilling rigs
  - Chemical and petrochemical plants
  - Waste disposal
  - Gas turbines
  - Natural gas pipeline compressor stations
  - Plant oil extraction (soybean, etc.)

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook

Fragen ???