

FREEDOM GP



THE NEW GENERATION
OF GAS DETECTORS

THE ULTIMATE VERSATILITY

 **TELEDYNE**
Gas and Flame Detection



EXPLORE ALL
ITS FEATURES.



FREEDOM GP

THE UNIVERSAL SOLUTION FOR COMMERCIAL AND INDUSTRIAL ENVIRONMENTS

The **FREEDOM GP** is a fixed gas detector designed to detect toxic gases, refrigerants, oxygen and CO₂ in commercial and industrial applications.

Building on Teledyne's expertise, the **FREEDOM GP** combines ruggedness, embedded intelligence and ease of use to deliver high-performance, reliable gas detection that is simple to operate on a daily basis.

The **FREEDOM GP** is ideally suited for:

- General industry
- Industrial utilities
- Commercial and industrial refrigeration
- Laboratories and research centres
- Wastewater and water treatment facilities

*A reliable detection solution, built to last,
protecting both people and the environment.*



DETECTION TECHNOLOGY TAILORED TO EVERY NEED

Because every site presents unique challenges, the **FREEDOM GP** offers a wide range of detection technologies suited to specific hazards and environmental conditions.

Whether monitoring toxic gases, oxygen depletion or enrichment, CO₂, or refrigerants, the **FREEDOM GP** provides the most appropriate sensing technology: electrochemical or Rock Solid cells, infrared or semiconductor sensors.

Each sensing cartridge is pre-calibrated for fast, tool-free commissioning and optimum accuracy from day one.

Combined with its modular architecture, this wide range of sensing technologies enables the **FREEDOM GP** to adapt to virtually any industrial environment.

TECHNOLOGY	GASES				
	Toxic	Oxygen	CO ₂	Refrigerants	
	Electrochemical	✓	✓		
	Rock Solid	✓			
	Infrared absorption			✓	✓
	Semiconductor	✓			✓

A CLEAR AND INTUITIVE USER INTERFACE

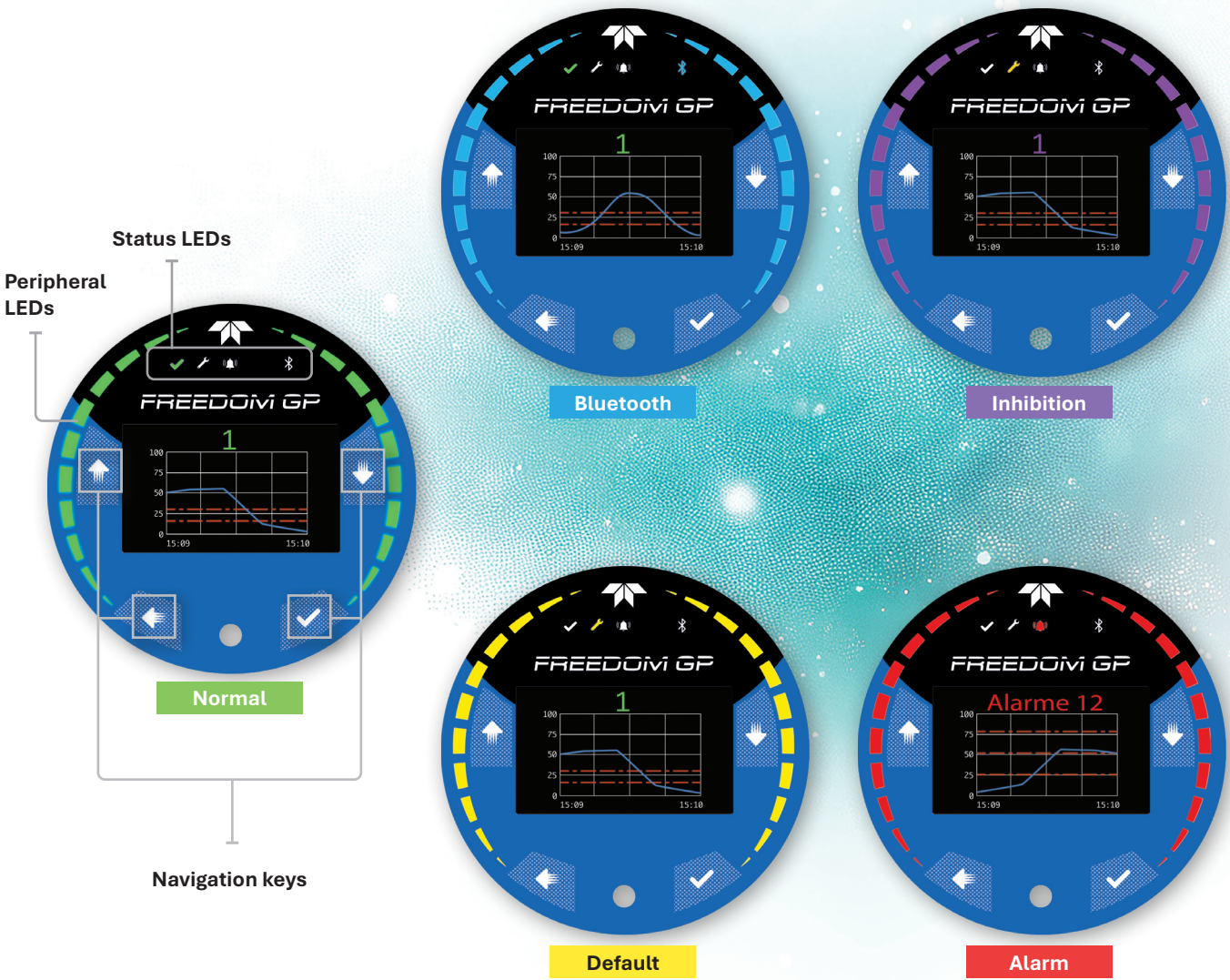
The **FREEDOM GP**'s interface is designed for intuitive operation with no need for specialized tools or complex procedures. Its multicolour TFT display provides comprehensive information at a glance, including real-time readings, detected gas, measurement units, live trend graphs and text-based configuration menus.

Smooth navigation across the menus is achieved using four magnet-activated buttons, eliminating the need to open the housing in hazardous areas.

Peripheral LEDs surrounding the display provide clear, long-distance visibility of the **FREEDOM GP**'s status and interactions, even in bright ambient light.

At a glance, operators can identify whether the unit is operating normally, in fault or alarm condition, or connected via Bluetooth to the GF Sync app.

Overall, the interface is designed to simplify operations and enhance user confidence in the field.



A DURABLE DESIGN BUILT FOR RELIABILITY

In industrial environments, reliability and durability are essential.

The **FREEDOM GP** features a polycarbonate enclosure reinforced with stainless-steel fibres, specifically developed to provide excellent mechanical strength, resistance to corrosive environments and protection against electromagnetic interference.

Its design, featuring electronics integrated within the sensor cartridges, ensures long-term measurement stability while minimising corrective maintenance requirements.

Compliant with regulations applicable to non-hazardous atmospheres, the **FREEDOM GP** meets the quality and performance standards expected in modern commercial and industrial facilities.



IP66 certified

-20°C

+60°C*



AN OPEN AND SCALABLE SYSTEM

The FREEDOM GP has been designed for seamless integration into existing industrial infrastructures.

Through its analogue output or digital Modbus communication, it can easily interface with gas detection control panels, PLCs and supervisory systems.

The HART® 7 protocol further enhances communication by providing maintenance and device lifecycle information.

The optional remote sensing head capability optimises detector placement and simplifies maintenance in hard-to-access locations. A flexible solution designed to reduce deployment complexity.





CYBER RESILIENCE
BY DESIGN

GF SYNC THE APP THAT MAKES DETECTION EASIER

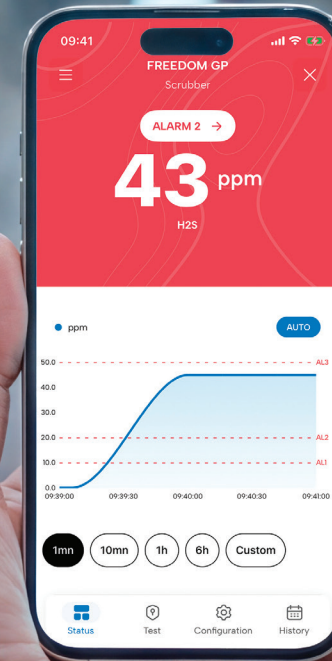
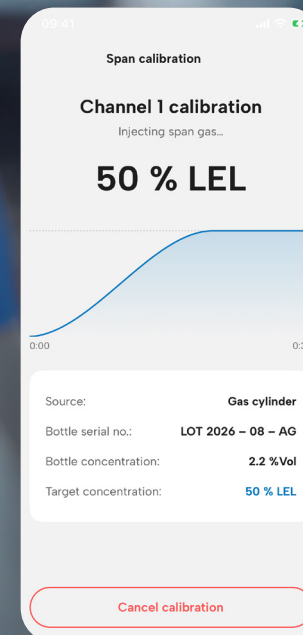
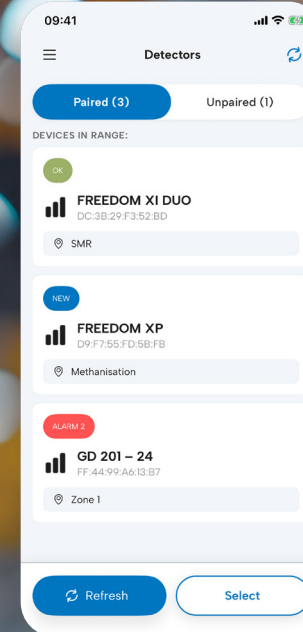
Available free on the App store and Google Play, the GF Sync app revolutionizes gas detector management by providing instant access to all essential functions, while unlocking the full capabilities of the **FREEDOM GP**:

- **Quick configuration:** set up your detectors in just a few clicks and save the configurations for easy, error-free replication.
- **Simplified calibration:** perform reliable and fully traceable through a guided, step-by-step process.
- **Optimised maintenance:** access event history, monitor sensor diagnostics and facilitate plan maintenance schedules proactively.
- **Digitalised monitoring :** automatically generate calibration certificates that can be exported as .pdf or .csv files.
- **Enhanced cybersecurity:** secure, encrypted communications, compliant with the latest and most stringent cybersecurity standards.

With **GF Sync**, deployment and operation become faster, safer and more efficient. **Your safety, at your fingertips.**



Download
the app for free





A MODULAR DESIGN TO SUIT EVERY NEED

Because every industrial environment has its own specific constraints, the **FREEDOM GP** offers a wide range of options to tailor detection to any configuration.

This flexibility ensures seamless integration into all existing systems, whether simple or complex. Sensors and sensing cells can be replaced while retaining the stainless-steel mounting bracket, reducing spare parts costs.

Choose, configure, customise:

• Remote sensing head

The sensor can be installed up to 30 metres or 100 feet from the transmitter, facilitating installation in hard-to-reach areas.

• Configurable analogue output

2- or 3-wire configuration depending on the detection technology.
Sink or Source options
Adjustable 0–4 mA range

• On-board relays

Three configurable alarm relays, one fault relay and an acknowledgement input for standalone local operation.

• Modbus output

The Modbus output enables a loop architecture with addressable detectors connected to a gas detection controller or a PLC.



• Display

TFT display with direct access to multilingual menus, trend curves, and detection data.
Multicolour, backlit LCD display for installation in the most demanding climatic environments.
Display-free versions with status LEDs.

• Universal detection cartridge

All cells and sensors are compatible with the same main circuit board.
This simplifies maintenance and reduces the number of part numbers.

2.1 Maintenance
1. Calibration >
2. Calibration Gas >
3. Cartridge Replacement >
Date of Last Calibration

Oxygen % Vol
Sensor Type: Electrochemical
Serial Number: 3848403
HMI FW: 132.234.23
SFT FW: 132.14.2.33

5.2.4.Options
1.HART >
2.I/O Board >
3.Bluetooth >

This modularity makes the **FREEDOM GP** a universal solution, adaptable to any architecture, any industry and any security requirement.

THE ULTIMATE VERSATILITY

Combining reliability with operational simplicity, **FREEDOM GP** sets a new standard for fixed gas detection-protecting critical assets while optimising maintenance and reducing operating costs

FEATURES

Detection technologies	Electrochemical and Rock Solid cells, infrared and semiconductor sensors
Materials	Polycarbonate reinforced with 15% stainless-steel fibre
Ingress protection	IP66
Operating temperature (depending on sensor type)	LCD: -20°C to +60°C TFT: -20°C to +55°C
Output signals	4-20 mA analogue output, 2- or 3-wire, HART® 7 protocol
Relays	3 alarm relays + 1 fault relay (optional)
Digital output	Modbus (optional)
User interface	Multicolour TFT or LCD display, high-visibility LEDs, 4 magnet-activated buttons
Maintenance	Simplified via the GF Sync application (Bluetooth SIG, BLE 5.0, encrypted communication)
Installation	Local or remote sensor head
Certification	EN61010, IEC 62311
Functional safety	SIL2 / SC3 High Demand (pending)



GF30643A-EN - Teledyne Gas and Flame quality assurance programmes demand the continuous assessment and improvement of all our products. Information in this leaflet could thus change without notification and does not constitute a product specification. For more information, please contact us or your company representative.

CONTACT US

