









snsnorthern.com

Gas Safety Controls **Product Catalogue** 

### The UK's leading designer, manufacturer and supplier of the latest range of gas safety products.

Ranges include; gas ventilation and gas interlock systems for use in commercial kitchens, gas pressure proving systems and gas detection systems for school laboratories and boiler houses. Designed and manufactured in the UK.







38 Years Industry Experience

C



**GAS SAFETY** IN EVERY **ENVIRONMENT.** 

24/7 Tech Back Up

Fully Trained Sales Engineers



Easy to Install Solutions







Express Delivery Available

# Office information

For your local sales manager visit **snsnorthern.com/reps** 



### Head Office

S&S Northern Ltd Wallace Francis House Barnes Wallis Way Buckshaw Village Chorley Lancashire PR7 7JN

T +44 (0) 1257 470 983 E info@snsnorthern.com

South East 42 Towerfield Road Shoeburyness Essex SS3 9QT

T +44 (0) 1702 291 725 F +44 (0) 1702 299 148 E south@snsnorthern.com

### Contents

	KITCHEN		SCIENCE LA
08-09. 10.	Kitchen Introduction	18-19.	Science Lab Introduction
10.	<b>3000S</b> Energy Saving Demand Controlled Ventilation System	22.	1000VW+ Ga Electric & Wa
11.	<b>CT1750</b> Solid Fuel Gas Safety System	23.	Isolation, Fan 1000V+ Gas F Electric Isolat
12.	CT1650+ Intelligent Current Monitoring Interlock System	24.	Interlock 1000V Gas Pr
13.	CT1250 Current Monitoring Interlock	25.	Interlock 1000SW+ Gas
14.	System CT1200S Gas Interlock		Electric & Wa Isolation
15.	System (2 Fan Inputs) 2000S Gas Proving	26.	1000S+ Gas F Electric Isolat
16.	System (4 Fan Inputs) 1500S Gas Interlock System (4 Fan Inputs)	27.	<b>1000S</b> Gas Pr System
36-37.	DETECTORS Detectors Introduction	46-47.	ANCILLARIES
36-37. 38-39.	Carbon Dioxide &	46-47. 48.	FAB-1 Fire Ala
40.	Temperature Monitor CO2-X Carbon Dioxide Monitor	48.	Fire Alarm by Control Panel Emergency St
41.	<b>CO2-C1</b> Carbon Dioxide Monitor (No Screen)	40.	Class Emerge Off Button
42.	<b>Gas Detectors</b> Natural Gas, Carbon Monoxide,	49.	Fusible Link H Detector
43.	LPG, O2, Hydrogen Mini Merlin CH4CO (TFT) Combined Natural	49.	Sounder Alarn Alarm Beacor & Visual)
	Gas & Carbon Monoxide Detector	50.	Air Pressure S
	CH4COTFT Mini Merlin	50. 51.	Gas Solenoid Water Soleno
44.			



Water an Interlock	
as Proving, plation, Fan	31.
s Proving, Fan	32.
Gas Proving,	33.
Water	34.
as Proving, plation	
Proving	

### BOILER ROOM

9.	Boiler Room Introduction
•	<b>GDPX+</b> Gas Proving & Detection with remote monitoring (16 Zone)
	<b>GDP2X</b> Gas Detection (2 Zone)
	<b>1000BH</b> Gas Proving & Detection (2 Zone)
	<b>GDP2</b> Gas Detection (2 Zone)
	<b>500S</b> Utility Isolation Panel

### RIES

Introduction Alarm bypass	52.	<b>DPM2</b> Dual Gas Pressure Transmitter Module
bypass inel	52.	<b>PM2+</b> Intelligent Dual Current Monitor
<b>y Stop</b> Break rgency Knock-	53.	CS2 / CS1 Dual Current Monitor
n <b>k</b> Heat	53.	<b>Optical Sensor</b> Canopy Mounted Smoke/Steam Sensor
l <b>arm Beacon</b> con (Audible	54.	Duct Thermostat Duct Mounted Temperature
re Switch	54.	<b>TBX Gas Meter</b> In-Line Gas Meter
oid Valve enoid Valve	55.	<b>Inverter</b> Single-Phase & Three Phase Inverter
ransmitter ng Sensor	55.	Speed Controller Single Phase Speed Controller



























# Product key features

The icons are located at the top of each product page



























44 (m) (m)

28

# **Boiler Room**

S&S Northern have a solution for every commercial Plant room application. We offer a wide range of control panels, gas detectors, heat sensors and gas solenoid valves. Whether your project is a small residential application or a large scale plant room we have the knowledge and experience to offer the perfect products. Remote monitoring, Modbus and data logging are available on our GDPX Range.

PAGES 28-33



BOILER ROOM



- Connections for heat detectors/thermal links
- Two spare Input Connections (for additional detectors, fans, equipment)

\*Gas pressure transmitter included

LPG - X Detector Page 42-43

Fusible Link Page 49

Emergency Stop Page 48

Merlin

**GDPX+** 

MERLIN

RESE

The Merlin GDPX+ is a multi-

zone gas detection panel which can be used in many

applications such as boiler

house/ Plant rooms, factories,

car parks and high rise. It can be used with up to 16 Merlin

gas detectors for monitoring

and detecting gas including

The GDPX+ can be remotely

snsnorthern.com so you can

sites from your computer or

monitor the status of your

carbon monoxide, LPG,

monitored from www.

Hydrogen.

smartphone.

Natural Gas, Oxygen and

CE 2

Zone 1

Zone 2 Zone 3 Zone 4 GAS ON

OK

OK DISABLED

 $\bigcirc$ 

···· 2) 2) 2) 2) 0 58.5

30



BOILER ROOM



GAS DETECTION SYSTEM

RESET

CE

• Connection for sounder/strobe

GAS Zone 1 . . . OK ON Zone 2 . . . DISABLED

585

MUTE











The Merlin panel is designed to provide the user with an effective means of isolating the utility, via a key switch or in the event of an emergency, by operation of the emergency shut off button. The 500S has a fascia mounted emergency shut off button fitted as standard and the fascia mounted LEDs give simple and concise information to the operator. The panel is fully compatible with S&S Northern remote emergency stop terminals allowing a large number of emergency terminals to be connected in series and wired back to the panel.

### **Additional features**

Easy installation

• Covered by S&S Northern Itd 3 year warranty



X

Gas Solenoid valve Page 50

Fusible Link Page 49

Emergency Stop **Page 48** 



SNSNORTHERN.COM

35 BOILER ROOM

# Detectors

S&S Northern manufacture a wide range of gas detectors for monitoring air quality, toxic gases, explosive and flammable gases. They are designed to be easy to install and maintained. Each target gas has unique characteristics and therefore the detector needs to be installed to suit the target gas, please contact us or have a look on our website for mounting height information and advice on installation.

PAGES 36-45

•

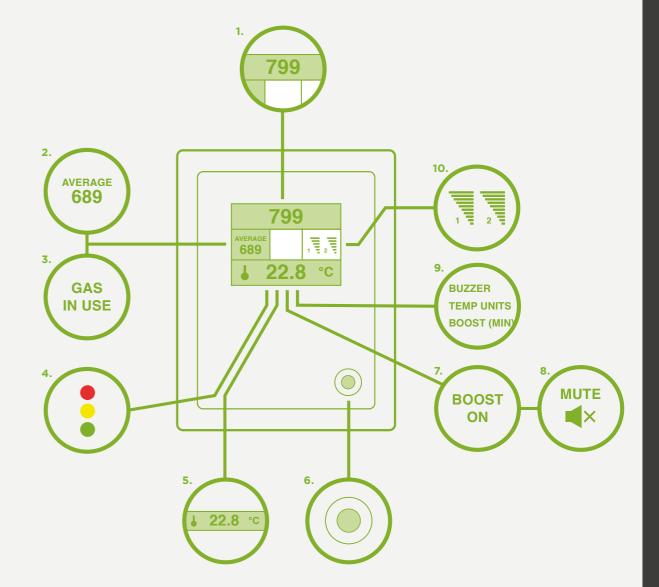
36



DETECTORS

# SIMPLE, **EFFICIENT &** RELIABLE

# **Carbon Dioxide and** temperature monitor



✓ Dual power 230V AC or 12-24V AC/DC Modern design with a slim and compact enclosure

1. CO2 Levels Displays current c02 gas levels in parts per million (ppm).

2. Average CO2 Levels Average c02 readings over an 8 hour period when above 600ppm.

3. Gas in use periods. Indication when the gas is being used.

4. Traffic light indicator 6. Touch button Display changes colour Used to activate 'Boost' dependent on the cO2 levels and temperature. Green-Safe, Yellow-

Attention, Red-Danger. 5. Temperature reading

Displays temperature levels over 30 minuet

8. Mute

DETECTORS

39

or 'Mute'.

### 7. Boost on

Analogue outputs will run at optimum voltage (10V) to run a fan.

Sounder alarm mute indication.

9. Easy installation Engineers settings menus for easy navigation

10. 0-10V Outputs 0-10V analogue outputs progress bars



The CO2-X is a dual powered carbon dioxide and temperature monitor, which has the ability to show average readings over an 8 hour period.

### **Additional features**

- Can automatically change alarm settings based on gas valve activation
- CO2 and temperature levels measured and displayed clearly.

- 2 x 0-10V Signal output.
- Displays average readings of CO2 concentration over an 8 hour period.
- End of life and fault notifications.
- Pre alarm and alarm output.
- Variable CO2 and temperature output



Merlin 2000S Page 15

> Merlin 1000VW+ Page 22

> > Merlin 1000S **Page 27**

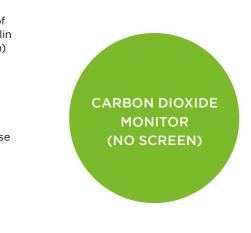
The budget friendly Merlin CO2-C1 detector is a mains powered monitor to give the end user simplified analysis of the carbon dioxide levels in the surrounding area. The Merlin CO2-C1 has a traffic light colour system (red, amber, green) with high, medium, low indications.

### Additional features

- Traffic light display to clearly indicate low, medium and high levels of CO2.
- Low voltage switch when levels of carbon dioxide increase
- Mains powered

# Merlin CO2-C1





SNSNORTHERN.COM

41

DETECTORS

### OFTEN USED WITH NG %LEL Merlin GDPX+ Page 18 Merlin GDP2X Page 20 Merlin 1000BH 585 Page 21

# **PRE-CALIBRATED AND COMPACT**

MEASU

ALARM

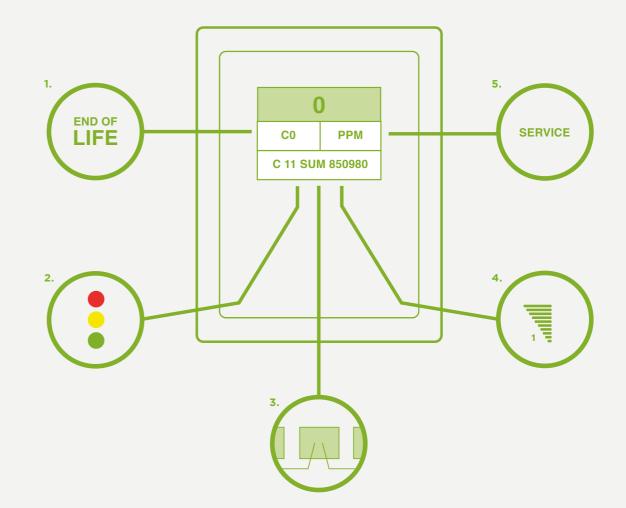
GAS	NG: Semi-conductor
SENSOR TYPE	LPG: Semi-conductor
TIPE	H: Semi-conductor
	CO: Electro-chemical
	02: Electro-chemical
GAS LEVEL	NG: 8% LEL
PRE-	LPG: 8% LEL
ALARM	H: 8% LEL
	CO: 20 PPM
	02: 18.5-19.5%
EXPECTED	NG: 10 Years
SENSOR	LPG: 10 Years
LIFE	H: 10 Years
	CO: 5 Years

MEASURING	NG:300-10,000 PPM	
RANGE	LPG:300-10,000 PPM	
	H: 100-10,000 PPM	
	CO: 10-10,000 PPM	
	02: 0-30%	
GAS LEVEL	NG: 10% LEL	

LPG: 10% LEL 100 PPM @ 10 MINS 300 PPM @ 1 MINS

# **Gas Detectors**

The S&S range of gas detectors are used in various applications such as boiler/plant rooms, hospitals, laboratories and high rise buildings.



Modern design with a slim and compact enclosure ✓ No calibration required - pre-calibrated in the factory ✓ Power supply 12-24V AC/DC ✓ Various outputs to work with control panels Connections available for Modbus outputs

- 1. End of life indicator To alert the user that the detector has reached its

expected operational lifecycle.

### 2. Traffic light indicator

To summarise gas levels: display changes colour dependent on live gas levels. Green-Safe, Yellow-Attention, Red-Danger.

3. Multiple detector chains Individually identify each detector and the monitoring

4. Gas levels

Displays current gas levels in parts per million (ppm) or low explosion level (LEL) dependent on the gas detector type. Levels visible at all time.

zone the detector is located.

### **5. Service & Maintenance** A service screen will

intermittently flash every 30 seconds after one year of service.

SNSNORTHERN.COM

DETECTORS

43

# **Mini Merlin CH4CO TFT**



COMBINED NATURAL GAS & CARBON MONOXIDE DETECTOR



The Mini Merlin CH4CO TFT for domestic applications.

The Mini Merlin CH4CO TFT is a dual gas sensor carefully designed and tested to monitor levels of natural gas-Methane (NG) and Carbon Monoxide (CO) in the air. If there is a dangerous buildup of gas or unsafe levels of carbon monoxide at the sensor, this device can shut off the gas supply via a gas safety valve.

### Additional features

- Dual sensor built into one controller
- End of life notification
- Shuts off gas when in high alarm
- Low voltage input to connect with emergency stops and fire alarms.
- Pre alarm and alarm output
- Variable CO2 and temperature output
- LPG & CO detector available



Gas Solenoid Valve Page 50

Emergency Stop Page 48

Fusible Link Page 49



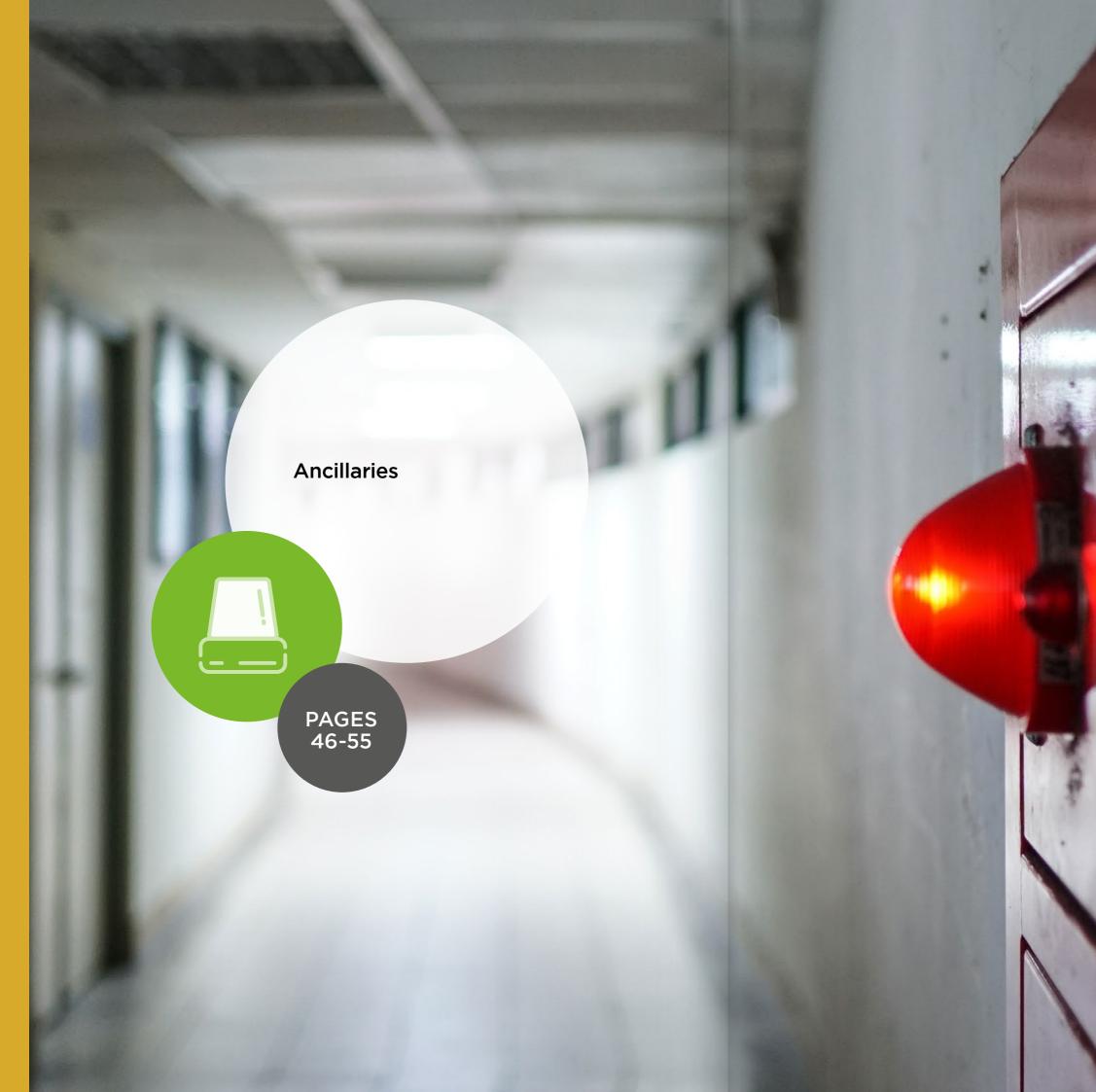
We offer a full range of bottled test gases and testing equipment. The Bump kits are is used to check and maintain gas detectors.

- Carbon Monoxide
- Methane
- LPG
- Nitrogen
- Others available on request.



**GAS DETECTOR** TESTING / CALIBRATION

45





# **FAB-1** Fire Alarm bypass





The Merlin FAB1 can be integrated with any of the Merlin suite of products to give the operator the opportunity to temporarily bypass the gas isolation system. With prior notice to a fire alarm test, the operator can turn the key to the on position giving an uninterrupted gas supply for between 10 and 45 minutes.

During this time the system controlling the gas will ignore shut-off signals from the buildings fire alarm system and allow factors such as heating systems to remain operational. The bypass time can be adjusted using the blue switches inside the panel. During the bypass time gas can still be shut off, pressing the emergency gas shut off button will close the gas solenoid valve.

OFTEN USED Merlin GDP2 Page 33 Merlin GDP2X Merlin 1000BH Page 31 Page 32 WITH

The fusible link is most commonly used in a boiler room application. These are fitted as a means of fire protection, if the boiler room temperature reaches over 72 degrees then the fusible wire inside will melt and therefore send an electronic signal to isolate the gas supply. Multiple fusible links can be fitted in one area.

# Emergency Stop



Merlin Merlin 20005 3000S 1000VW+ Page 15 Page 10

OFTEN USED WITH Page 22

The Emergency Stop button is used to isolate the gas supply into an area in the event of emergency.

Merlin

The button is fitted with a Perspex screen which should be pressed to activate, and then can be reset using a key (supplied with every emergency knock-off button). This button can be linked with any Merlin gas safety system to give various means of isolation within an area.

OFTEN USED WITH Merlin GDP2 Page 33 Merlin Merlin GDP2X Page 31 GDPX+ Page 30

The Sounder Alarm Beacon is a remote alarm beacon most commonly used outside a boiler room. This sounder alarm beacon can give both an audible and visual alarm in the event of an emergency. Various colours are available to suit the application.



# Fusible Link



# Sounder **Alarm Beacon**



# Air Pressure Differential Switch



An air pressure differential switch is a mechanical switch fitted in ductwork which can be used to monitor and check airflow rates. These switches are adjustable and have a range from 20-300PA, they also come with a 1m duct kit to be fitted into the ductwork and detect the airflow.

# Gas Solenoid Valve

Merlin	Merlin	Merlin
1000BH	1000S	2000S
Page 32	Page 27	Page 15

OFTEN USED WITH

Our gas solenoid valves are 230V powered, normally closed, auto-reset and will most commonly be powered from our Merlin gas safety systems. In the event of an emergency, the Merlin gas safety system will take power away from the gas solenoid valve causing it to slam shut, and when power is re-instated this will then allow gas to flow through the pipework.

We have a full range of sizes available, both screwed and flanged, and can offer specialist gas valves on request.

OFTEN USED WITH

Merlin 1000VW+ Page 22

Merlin 1000SW+ Page 25

Our water solenoid valves are most commonly found in science laboratories where the teachers want full control of the water supply to the benches, but they can be used in a range of applications.

Similar to a gas solenoid valve, our water solenoid valves are normally closed, autoreset and 230V so they can be controlled by the Merlin gas safety systems.

Once again, we have a full range of sizes available, WRAS approved and can offer specialist types on request.



A transmitter used to check for leaks in the gas line, by detecting pressure drops from the downstream port of the gas solenoid valve.

# Water Solenoid Valve



# Pressure Transducer

# **Spec Wizard**

Do your projects include Boiler/PlantRooms? Laboratories? Commercial kitchens? Receive up to date knowledge of Gas Safety Regulations.



The CPD session will cover the following 4 areas:

**BB100 & IGEM** UP/2 - GAS SAFETY IN **BOILER HOUSES** / PLANT ROOMS

### Ensure your project has the correct equipment

Here at S&S Northern we ensure your project is meeting all the latest gas regulations and recommendations.

As part of our dedication to continual progress and development, the S&S Northern team has developed the pioneering Spec Wizard. Spec Wizard is a dynamic resource that significantly reduces a consultant's workload by searching for and identifying the most appropriate equipment for a project, location or specification.

By simply answering questions from the drop down menu, Spec Wizard will instantly generate the ideal specification a consultant needs to meet various gas regulations on their project.

Spec Wizard will then create and email an equipment list which can then be directly used within a specification document, saving hours of time and money during the research and sourcing stages.

For help with the Spec Wizard or if you would like one of S&S Northern's technically trained sales engineers to explain the process over the telephone, please call us on +44 (0) 1257 470 983

BS6173:2009 & DW172 2018 - GAS INTERLOCKING FOR COMMERCIAL **KITCHENS** 

SNSNORTHERN.COM/CPD

### Book Your Free CIBSE Accredited Webinar.



**IGEM UP/11 EDITION 3** (2018) - GAS CONTROL IN EDUCATIONAL ESTABLISHMENTS, SUCH AS FOOD **TECHNOLOGY ROOMS** AND LABORATORIES

IGEM UP/19 - CO2 MONITORING FOR COMMERCIAL **KITCHENS** 

# S&S Northern is a friendly family business proving top quality products and outstanding customer service.

S&S Northern is a friendly family business proving top quality products and outstanding customer service. S&S Northern has built a reputation in the UK that is second to none. Established in 1995, S&S Northern has become synonymous with designing and manufacturing gas pressure proving and gas detection equipment.

S&S Northern has achieved its position as the market leader as a result of its staff's dedication to supply top quality products that are safe, reliable and meet every client's individual requirements. Its aim is to always provide total satisfaction to those who specify, purchase and install S&S Northern products.

S&S Northern continually invests in training for every member of staff to ensure the customer receives the right product to meet their requirements at the right price and delivered on time. S&S Northern is committed to investing in research to improve its efficiency and the quality of its gas interlocking, gas ventilation and gas shut off systems and products. With bases in the North and South of the UK, S&S Northern is perfectly placed to respond to customer demand in any area and to respond immediately to requests for site visits or general enquiries.

Keep up to date with S&S Northern and industry news at **snsnorthern.com/blog** or follow us on social **y c @snsnorthern** 

### Head Office

S&S Northern Ltd Wallace Francis House Barnes Wallis Way Buckshaw Village Chorley Lancashire PR7 7JN

T +44 (0) 1257 470 983 E info@snsnorthern.com

South East 42 Towerfield Road Shoeburyness Essex SS3 9QT

T +44 (0) 1702 291 725 F +44 (0) 1702 299 148 E south@snsnorthern.com



snsnorthern.com 🄰 🖸 @snsnorthern