

Dräger
德 尔 格

MiniWarn
Multi-Gas Instrument
多种气体检测仪

符合您的需要
Fits Your Application

智能化 Intelligent

外壳坚固 Rugged

灵活多样 Flexible

人体工程学设计 Ergonomic

操作简单 Easy to use



MiniWarn

德尔格：检测领域的先驱

从1937年，第一支检测管问世起，德尔格就已成为全世界在工业环境中检测气体和蒸汽的领导者。先进的科技使我们一直走在便携式气体检测仪的前沿。我们提供的电化学和催化燃烧式传感器比其它制造商的产品灵敏度高且种类繁多。所有这些高科技全部集中在MiniWarn中——当今最好的气体检测仪。

MiniWarn:符合您的需要

MiniWarn虽然是由德尔格制造的，但设计者却是它的使用者。当我们设计MiniWarn时，聆听了您在检测仪方面的需要：重量轻，坚固，使用简单，操作灵活，低维护，价格低廉且带报警提示。这些特性是MiniWarn设计的主要重点。简单的三键操作，先进的电子技术，高科技的原材料，多重仪器配置和常用的选项使得MiniWarn使用方便且符合您的需要。

Draeger: First in detection

Since 1937, when we introduced our first detector tube, Draeger has been the world leader in the detection and analysis of gases and vapors in the industrial workplace. This leading edge technology has kept us on the forefront of portable gas detection. We offer more sensing capabilities and variations in electrochemical, and catalytic sensor technologies than any other manufacturer. All of this technology has been combined in the MiniWarn to provide you with the best gas detection available today!

MiniWarn: Fits your Application

Made by Draeger, but designed by gas detection instruments users. When we designed the MiniWarn, we listened to what you wanted in a monitor; lightweight, rugged, easy-to-use, flexible operation, low maintenance, low cost of ownership and attention-getting alarms. These features were the main design criteria of the MiniWarn. The simple three button operation, advanced electronics, high-tech materials, multiple instrument configurations and practical options make the MiniWarn fit your specific application as easy as it fits in your hand.



报警灯光最亮 Brightest

可视报警灯
visual alarm light



超大显示屏 Large Display

数字和符号显示明显
easy to view numbers and characters



灵活多样 Most Flexible

多种传感器，电池及充电器可供选择
widest selection of sensors, battery packs and chargers



使用简单 Easy to use

符合人体工程学设计的坚固外壳

先进的高分子材料外壳具有金属的强度，但重量却很轻，非常适于在密闭空间使用，即使是整天携带也非常舒适。在恶劣的环境条件下可以防腐蚀。所有的连接点和开口处均密封完好且配有垫圈以防止水汽和灰尘的侵入。外壳的曲线设计便于您单手握住仪器。

操作简单

MiniWarn小而坚固且易于操作。简单的三键操作，开机、关机、确认报警和查看需要的常规数据（例如，电池电量）均只需使用仪器面板上的三个键即可。标定和报警设定等功能只需通过简单语言的菜单命令即可完成。这些功能都有密码保护，以防不小心或未授权人员的改动。在这个模式下，三个键的功能分别是向上、向下和回车以帮助您浏览菜单，**MiniWarn的操作非常直观简单。**

Rugged Ergonomic Enclosure

The advanced polymer enclosure provides the strength of a metal enclosure for those tight confined spaces, but it's much lighter. It is also comfortable enough to wear all day and provide superior resistance to chemicals and tough environmental conditions. All joints and openings are sealed and gasketed to prevent the ingress of water and dust. The curved design of the enclosure fits in your hand when you're holding it. The two-way belt clip can be worn with the alarms pointing up for maximum warning of the sensors can be worn pointed down for maximum resistance to air-borne dust and splashing water.

Easy Operation

The MiniWarn is one tough little instrument, that is very easy to operate. The three buttons on the front of the monitor turn it ON, OFF, acknowledges alarms and access routinely needed data like battery levels. Functions such as calibration and alarm set points are adjusted through plain language menu commands. These functions are protected by a pass code to prevent accidental or unauthorized adjustment. In the adjustment modes, the three-buttons act as up, down, and enter buttons to navigate you through the menu. **Operation of the MiniWarn is very intuitive.**

技术参数

Specifications

尺寸 Size:	78 x 143 x 58mm
重量 weight:	450g 带镍镉电池 with NiCd battery
防护等级 Environmental Rating	IP-65
环境条件 Environmental Range	-20 ~ 40°C 连续工作 continuous -40 ~ 55°C 短时间工作 for short duration
声报警 Audible Alarm	电磁蜂鸣器 piezo-electric alarm; >85 dBA 30cm
光报警 Visual Alarm	四个高强度 LED, 180° 范围内可见 Four high-intensity LED's; 180° visibility
数据存储器 Datalogger Capacity	50 小时, 1 分钟储存一个数据 (扩展型) 50 hours of one-minute averages (with "E" version)
电池寿命(在 25°C) Battery Life (at 25°C)	镍镉 NiCd; >10 小时 hours 镍氢 NiMH; >12 小时 hours 碱性 Alkaline; >12 小时 hours
认证 Approvals	UL; Class I and II, Division 1, Groups A-G, T4 CSA; Class I, Division 1, Groups A-D, T-4 CENELEC; EEx ia IIC T3/T6 (BVS)
泵最大取样距离 Maximum Pump Draw	用直径 4mm 软管可达 10 米 (10m) with 3/16 inch ID (4mm) hose

订货信息

Order Information

MinWarn 基本型 (无传感器) Basic (no sensors)	6408000
MinWarn 扩展型 (带数据存储器) (无传感器) Extend (Datalogger) (no sensors)	6408080

德尔格技术服务部竭诚为您提供技术培训及设备的定期维护,以确保操作人员正确使用,且设备可靠运行。

DraegerService offers regular inspection and training. We do everything to ensure your equipment will be repaired and back in operation as quickly as possible.

德尔格公司的质量保证系统获得符合 DIN ISO 9001/EN 46001 标准的合格证书,并得到: 量国内外组织的承认。

The Draeger Quality Management System has been certified according to ISO 9001/EN 46001 and recognized by numerous domestic and international organizations.

传感器 Sensors

气体 Gas	测量范围 Max Range	分辨率 Resolution	订货号 Part No.
乙醛 Acetaldehyde	0-200 ppm	1 ppm	6809115
乙炔 Acetylene	0-100 ppm	1 ppm	6809115
丙烯腈 Acrylonitrile	0-100 ppm	0.1 ppm	6809522
氨气 Ammonia	0-200 ppm	1 ppm	6809145
砷 Arsenic	0-20 ppm	0.01 ppm	6809135
溴 Bromine	0-20 ppm	0.05 ppm	6809165
丁二烯 Butadiene	0-100 ppm	1 ppm	6809115
二氧化碳 Carbon Dioxide	0-5% Vol.	0.1% Vol.	6809175
一氧化碳 Carbon Monoxide	0-2000 ppm	1 ppm	6809105
一氧化碳 Carbon Monoxide	0-10,000 ppm	1 ppm	6809120
氯气 Chlorine	0-20 ppm	0.05 ppm	6809165
二氧化氯 Chlorine Dioxide	0-20 ppm	0.05 ppm	6809165
易燃气体 Combustible Gases	0-100% LEL	1% LEL	6808280
乙硼烷 Diborane	0-1 ppm	0.01 ppm	6809135
二乙胺 Diethylamine	0-100 ppm	1 ppm	6809545
二乙醚 Diethyl Ether	0-200 ppm	1 ppm	6809522
二甲胺 Dimethylamine	0-100 ppm	1 ppm	6809545
二甲基硫醚 Dimethyl Sulfide	0-40 ppm	1 ppm	6809200
乙醇 Ethanol	0-300 ppm	1 ppm	6809115
乙烯 Ethylene	0-100 ppm	1 ppm	6809115
环氧乙烷 Ethylene Oxide	0-200 ppm	1 ppm	6809115
甲醛 Formadehyde	0-200 ppm	1 ppm	6809115
氟 Fluorine	0-20 ppm	0.01 ppm	6809165
锗烷 Germane	0-20 ppm	0.01 ppm	6809135
氢气 Hydrogen	0-2000 ppm	1 ppm	6809185
氰化氢 Hydrogen Cyanide	0-50 ppm	0.1 ppm	6809150
过氧化氢 Hydrogen Peroxide	0-20 ppm	0.1 ppm	6809170
硒化氢 Hydrogen Selenide	0-1 ppm	0.01 ppm	6809135
硫化氢 Hydrogen Sulfide	0-100 ppm	1 ppm	6809110
硫化氢 Hydrogen Sulfide	0-1000 ppm	1 ppm	6809180
异丁烯 Iso-Butene	0-300 ppm	1 ppm	6809522
异丙醇 Iso-Propyl Alcohol	0-300 ppm	1 ppm	6809115
甲醇 Methanol	0-200 ppm	1 ppm	6809115
甲胺 Methyl Amine	0-100 ppm	1 ppm	6809545
一氧化氮 Nitric Oxide	0-200 ppm	1 ppm	6809125
二氧化氮 Nitrogen Dioxide	0-50 ppm	0.1 ppm	6809155
氧气 Oxygen	0-25% Vol.	0.1% Vol.	6809130
光气 Phosgene	0-3 ppm	0.01 ppm	6808582
磷化氢 Phosphine	0-20 ppm	0.01 ppm	6809135
磷化氢 Phosphine	0-500 ppm	1 ppm	6809535
丙烯 Propylene	0-100 ppm	1 ppm	6809115
氧化丙烯 Propylene Oxide	0-200 ppm	0.1 ppm	6809115
四氢化硅 Silane	0-50 ppm	0.01 ppm	6809135
苯乙烯 Styrene	0-100 ppm	1 ppm	6809522
二氧化硫 Sulfur Dioxide	0-100 ppm	0.1 ppm	6809160
四氢噻吩 Tetrahydrothiophene	0-40 ppm	1 ppm	6809200
特丁醇 tert-Butyl Mercaptan	0-40 ppm	1 ppm	6809200
三乙胺 Triethylamine	0-100 ppm	1 ppm	6809545
三甲胺 Trimethylamine	0-100 ppm	1 ppm	6809545
乙烯基乙酸酯 Vinyl Acetate	0-100 ppm	1 ppm	6809115
氯乙烯 Vinyl Chloride	0-100 ppm	1 ppm	6809115



Miniwarn

符合您的需要 Fits Your Application

灵活多样

是您设计了 MiniWarn, 所以特别符合您的需要。四个测量通道, 可供选择的传感器有 20 多种, 如您需要还可快速的更换传感器。三种电池供选择: 镍铬, 镍氢和碱性电池, 当需要 24 小时工作时可随时迅速更换。

完整地结合

需要进行远距离测量吗? 只需配一个外置泵, 它使用仪器的电源, 所以您又可以少带一个电池。当连接好后泵即开始工作, 这确保了气样传输到传感器上。需要把储存在仪器内置存储器中的数据下载吗? 只需把 MiniWarn 连到您的计算机上, 无须使用电缆, 利用红外接口即可传输储存的数据。

维护费用低

德尔格 XS 型传感器寿命长, 且维护费用低。CO, H₂S 和 O₂ 传感器的保质期长达三年! 所有 XS 型传感器只须每年标定一次。

Ultimate Flexibility

You design the MiniWarn, specifically for your application. Choose from over 20 different intelligent sensors for the four measurement channels, and change sensors as quickly as your needs change. The three battery pack options: NiCd, NiMH, and Alkaline, are interchangeable allowing for quick change-outs when 24-hour operation is needed.

Integrated Thinking

Need to make remote measurements? Just attach the external pump. It draws power from the monitor so you have one less battery to maintain. The pump starts when the locking switch is engaged. This provides a secure attachment and ensures that it delivers the gas sample to the sensors. Need to download gas exposure information from the internal datalogger? Just set the MiniWarn next to your computer. The Infrared Data port transmits the stored information without the use of cables.

Cost of Ownership

Draeger-Sensors XS provide the longest warranty and require the least maintenance of any sensor in the industry. The CO, H₂S and O₂ sensor are covered by a three year warranty! All XS sensors require Span calibration only once a year.

