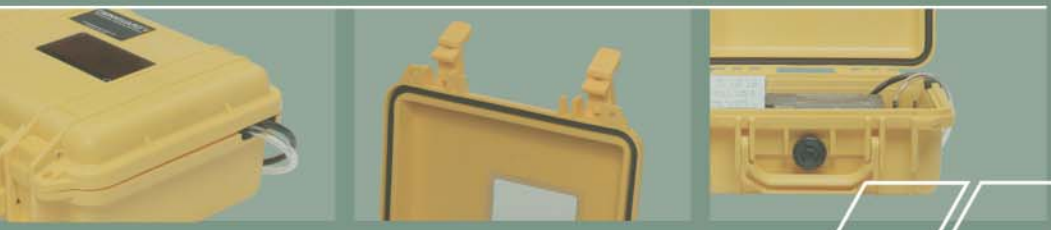
OMNIGUARD™ 4



The clear choice for monitoring and documenting Vacuum and Pressure in a containment area. Ideal for Asbestos, Lead and Mold abatement and Clean Room monitoring.

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Omniguard 4: Features

The Omniguard 4 utilizes state of the art pressure measurement technology to accurately document vacuum and pressure inside a containment area. With features designed to display information clearly and quickly, you'll be confident that you have the best instrument for the job.

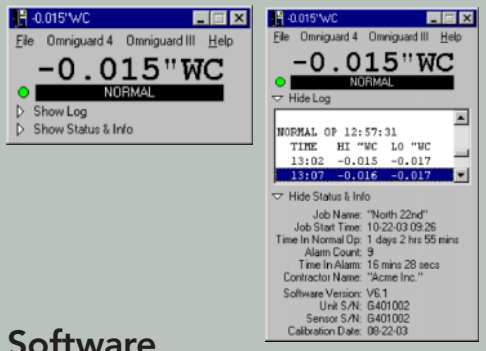
- A 95 decibel audible alarm and status LED notify workers and bystanders when containment is lost
- B USB and Serial ports support PC communication for transferring job logs to a computer
- C Rugged self-contained unit includes USB cable, owner's manual, 10' of hose and spare paper roll stored in the case
- D Thermal printer, no ink ribbons
- E Paper stores easily in protected compartment
- F Menu driven interface for easy set up and use
- G Dual inlet ports allow monitoring between two areas
- H Instant on screen help
- I Large graphics display shows current pressure, monitoring status and alarm settings at a glance
- J Multiple reports available a the touch of a button

Easy To Read

The Omniguard 4 comes equipped with a thermal printer that provides a detailed, easy-to-read log of the pressure in the containment area as well as recording any changes made to the setup. Retrieving the data log is quick and easy. The Print Job key can be configured to print the log for the last one, two or three days or the entire job. Each of these reports offers the user specific, pertinent information and a hard copy record of the data logged from the containment area.

Each printout provides a summary of the current job status, including the amount of time in Normal Operation, the number of Alarms and the amount time in Alarm Conditions (if any) along with an area for sign-off.

Selecting View/Print Job Logs from the Menu allows you to print logs from previous jobs. In addition, a Configuration Report can be viewed and printed from the Menu Screen. The Configuration Report provides a hard copy of all of operational settings, memory usage and log space available.



Job Report

Typical startup sequence

```
POWER OFF
  11-21-03  19:48:39

CURRENT JOB
 Johnson Bldg

      OMNIGUARD 4
  11-26-03  08:02:20
ALARM 1 @  -0.025" WC
ALARM 2 @  -0.100" WC

NEW TIME
 05:38:00

NEW ALARM 2
 -0.090" WC

NORMAL OP  05:51:24
 TIME  HI "WC LO "WC
 06:06  -0.032  -0.028
 06:21  -0.031  -0.027
 06:36  -0.033  -0.028
```

Setting changes print for verification

Containment pressure reached operating window... Normal OP

Alarm Condition (Alarm 1 tripped)

```
ALARM 1 @-0.025" WC
 08:51:26  -0.012" WC
 08:51:41  -0.002" WC
```

Back into Normal Operation

```
NORMAL OP  08:51:55
 TIME  HI "WC LO "WC
 09:06  -0.032  -0.028
```

New Date prints at midnight

```
11-27-03
 TIME  HI "WC LO "WC
 00:06  -0.032  -0.028
```

Signoff header

```
      JOB REPORT
  11-27-03  08:33:24

JOB NAME:
  Johnson Bldg
_____________________
CONTRACTOR:
  Acme Abatement
_____________________
SUPERVISOR:

_____________________
```

Summary Report

Report title

Job start and end date/time

Time spent in Normal Operation

Summary of all Alarm Conditions

```
      JOB SUMMARY

JOB NAME:
  Johnson Bldg
JOB START:
  11-26-03  05:38
JOB END:
  12-01-03  17:09
TIME IN NORMAL OP:
  5 days 10 hrs 23 mins
NUMBER OF ALARMS:
  2
TIME IN ALARM:
  16 mins 28 secs
```

The Job Report shows all activity for a 24/48/72 hour period or the entire job. The specific report printed is selected by the Print Job key. The key can be configured to print one of several job report periods. Reports include both the Job Name and Contractor Name, along with an area for sign-off.

The Summary Report is also printed whenever the Print Job key is pressed. The Summary Report provides a summary of the job status, including the amount of time in Normal Operation, the number of Alarms and the amount of time spent in Alarm Conditions (if any).

In addition, reports for earlier Jobs or a Configuration Report can be viewed and printed from the Menu Screen. The Configuration Report provides a hard copy of all operational settings, memory usage and log space available.

Software

Combine the Omniguard 4 with your PC to create a powerful tool for monitoring a containment area. Use the included USB cable and free software to upload logs from the Omniguard for analysis and permanent storage. You can also use your PC to monitor the status of the Omniguard in real time using the USB cable or an optional serial cable.

For even more flexibility add an external modem to the Omniguard 4 for true remote monitoring. You'll be able to check the current status of a containment area and upload the log from anywhere using your computer and a phone line. The current pressure and alarm status are right there on the screen. Even the status LED is shown. Log updates appear just as they are being printed on the Omniguard.

OMNIGUARD 4™

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"The Omniguard 4's case was designed so it could operate with the lid closed. A window in the lid lets you see the screen and there's a slot in the side for hoses and cables. Keeping the lid closed means water and dirt stay out and that means a pressure recorder that keeps on working."

"Hang it by the handle, the hanging clip or just lay flat. The rotating screen lets you view the information no matter which way you look at it."

Features List

- Real time differential monitoring of pressure and/or vacuum level
- Extremely simple to set up and use
- Programmable high and low alarm setpoints
- Pressure displayed in units of Inches WC, Millimeters WC or Pascals
- 30+ day internal memory stores pressure readings and alarm occurrences with a date/time stamp
- Large easy-to-read graphic LCD display with backlight shows current pressure reading, operation status and alarm setpoints
- Multiple display modes allow easy viewing of pressure reading from a distance
- Adjustable Print/Log interval to conserve paper and memory
- Variable response rate to avoid nuisance alarms in windy environments
- Passcode protection prevents unauthorized tampering with job settings
- Stores Contractor name for use in Job Reports
- Print Job key can be configured to print the log from today, the past one, two or three days or the entire job when pressed
- Automatic printout and logging of all changes to settings
- Configuration report with current settings and monitoring status can be printed for easy review
- View Job Logs on screen, scroll through entire memory contents
- Temperature compensated circuitry reduces the need for offsite calibration
- Off-site remote monitoring capability using optional external modem
- Relay output can trigger remote alarm, telephone autodialer or external fan units
- Windowed case lid allows viewing pressure reading and status with the lid closed to prevent damage to unit from water and other construction debris
- Operating temperature range 30-130° F
- 1 Year Warranty

Easy To Use

The Omniguard 4 is a differential pressure recorder in a completely self-contained package. It was designed from the beginning to be extremely flexible yet easy to use.

That ease of use starts when you set up the Omniguard 4. It comes in a durable, impact resistant case. Everything you need, including hose, a spare roll of paper and the AC cord, stores easily inside.

It's easy to find a convenient spot for the unit at the job site since the Omniguard 4 is not position sensitive. You can lay it flat, stand it up or even hang it from a nail. The display can be flipped with the press of a button so that it's always readable and there's a window in the lid so you can see it when the case is closed.

Once the Omniguard 4 is in place, the backlit graphics display makes it easy to configure the unit and monitor the status. Pressure is indicated with large easy-to-read characters and alarm setpoints are always displayed. Screen icons show the monitoring, printer and audible alarm status with a glance. You also have the option of displaying only the pressure in even larger digits that can be read from across the room.

Detailed information for job setup, feature settings, operating instructions and troubleshooting are available on-screen at any time by pressing the Help key.

The Omniguard 4 ensures the site inspector that proper containment was maintained. Pressure readings are time stamped and logged into memory once containment has been established. Audible and visual alarms activate whenever the pressure reaches the alarm setpoints. Logs and summary reports can be printed at any time for easy review.

Durable and reliable, the Omniguard 4 is clearly the contractor's choice for containment monitoring.

"Multiple screens formats let you choose between the standard monitoring screen or an enlarged pressure reading that makes it easier to see from across the room."

1 Monitor Screen

View current pressure reading and alarm settings. Monitoring status is shown at the screen bottom. Printer and Alarm status areindicated by on-screen icons.

2 Edit Screen

(Alarm Setpoints shown)

Make changes to configurable settings. Saved settings are logged into memory and printed to the report.

3 Main Menu

Scroll through a menu of all functions, alter settings or get more info for the highlighted function with the Select or Help keys.

4 Help Info Screen

Detailed information and operating instructions are available at any time by pressing the Help key. Troubleshooting topics are also covered.

OMNIGUARD™ 4

Specifications

Differential Pressure Range: +/-0.250" WC (+/-6.35mmWC, +/-62.5 Pascals)

Accuracy: +/- .003" WC or +/-1% of reading whichever is greater

Resolution: 0.001" WC, (+/-0.05mm WC, +/-0.5 Pascals)

Burst Pressure: 3 psi (20 kPa) on either inlet port

Pressure Units Displayed: "WC (Inches Water Column), mmWC (millimeters Water Column), or Pa (Pascals)

Data Storage: 128,000 characters, 30+ days of readings (over 4,000 logged events) in non-volatile memory (no battery req'd)

Display: Graphic Liquid Crystal Display (LCD) with adjustable backlight and over 3.5 sq. inch viewing area

Internal Clock: the internal clock is powered by a self-charging lithium-ion battery that provides 30+ days of clock operation when AC or DC power is not present

Printer: 20 character wide thermal printer (uses 2.25" wide thermal printer paper)

Printing/Logging Rates:
Normal Operation — highest and lowest pressure readings printed/logged at intervals of 5, 15, 30 minutes or OFF
Alarm Condition — current pressure reading printed/logged at intervals of 15, 30, 60 or 120 seconds for first 10 minutes of alarm condition, slowing to 15 minute intervals thereafter

Alarms: Two programmable alarm setpoints, 95db audible alarm with flashing LED and on-screen warning indicate alarm condition

Pressure Inlets: Two 3/16" OD barbed hose connectors, 10 ft of hose provided

Serial Port: DB-9 Male, RS232

USB Port: USB V1.0 Type-B

Aux Alarm Port: 1/8" stereo phono jack, relay contact outputs: NC, NO and Common rated 1A @ 30Vdc or 0.5A @ 115VAC

Power: 115 VAC 60Hz with 6 ft power cord (220 VAC 50Hz optional,6VDC battery pack optional)

Case: Dimensions 9.25" x 7.5" x 4.5", Shipping Weight 6 lbs., Material is copolymer polypropylene with polycarbonate window in the lid, handle and stainless steel hanging hook

Warranty: One Year Limited Warranty

Accessories & Supplies

Remote Auxiliary Alarm
Battery operated high intensity strobe alarm with 95 db audible

OG Comm Software CD (free download)
Windows® software retrieves recorded job logs from an Omniguard and saves them to a PC, also allows offsite remote monitoring of Omniguard 4 when used with the OG4 External Modem
#OG-CSW

Autodialer w/Cable
Calls a preprogrammed telephone number & plays prerecorded message to alert personnel in the event of an alarm condition at the work site
#OG-Dial

OG4 External Modem w/Cable
Allows remote offsite monitoring of Omniguard 4, also allows remote retrieval of job logs, requires access to standard telephone line/jack
#OG-Modem

External Battery Pack w/Cable
Powers Omniguard 4 for up to 48 hours when the printer is turned off, 12-24 hours with the printer on
#OG-BatPk

220/240VAC Power
Converts unit to operate using 220/240VAC 50Hz, requires modifications to Omniguard
#OG-VAC220

Certificate of Accuracy
Recalibration and Verification of accuracy of Omniguard (annual renewal recommended)
#OG-Cert

OG Owner's Manuals (free pdf download)

OG Thermal Paper - 85' roll, 2.25" wide
Box (5 rolls) - #TP201.Box
Case (20 boxes) - #TP201.Case

OG External Hose (3/16" ID)
#OG-Hose (10')
#OG-Hose100 (100')

NIST Traceable Certificate -
Verification of accuracy traceable to NIST Standards
#OG-Nist

Optional Pressure Ranges - CALL

Autodialer w/Cable

External Battery Pack w/ Cable

Remote Auxiliary Alarm

OG Thermal Paper - 85' roll

OG External Hose (3/16" ID)

Cables

OG4 USB Cable 6'
Connects Omniguard to a USB equipped PC to transmit job logs to PC, #OG4-USB

OG PC Serial Cable 6'
Connects Omniguard to serial port equipped PC, OG4 cable has DB-9 on both ends, OG3 cable has mini-stereo plug on one end, #OG(3,4)-SC

OG4 Modem Cable 6'
Connects Omniguard to an external modem (DB-9M to DB-9F)
#OG4-MC

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