

UNDERGROUND MINING
department of transportation
STREET & SEWER
Boiler Room
steel mills &
MSHA
manufacturing
single-gas m
federal, state & local enforcement agencies

Multi-Gas Monitors oil refineries
Telecommunications & Cable
Permit-Required Confined Space
WATER TREATMENT PLANTS
Hydrogen Sulfide oxygen deficiency
FOOD PROCESSING & STORAGE OSHA
landfills & transfer stations
PERSONAL MONITORING

Note: Due to the new ATEX Directive in Europe, all references in this document to "Ex" or "EEx" for intrinsic safety approvals should be disregarded effective 7/1/03 within the member countries of the European Union (EU). At this time, this product is not approved in accordance with the new ATEX Directive and is not sold for use in hazardous atmospheres or explosive zones by customers within the EU. Outside of the EU, all references to intrinsic safety continue without change.



Gas Detection Monitors

www.quest-technologies.com





1060
CORPORATE CENTER DRIVE

"The **ONE & ONLY** System Solution"

Quest Technologies is one of the most widely recognized and respected manufacturers worldwide for safety and industrial hygiene instrumentation and software. It is through our lifelong commitment to continuous quality improvement, product innovation and a mission to delight our customers that we have achieved this status. Our expertise is the measurement, analysis and reporting of exposures to noise, vibration, heat stress, indoor air quality and toxic/combustible gases. We are unique in providing safety and industrial hygiene professionals with "The **ONE & ONLY** System Solution" to occupational and environmental exposure monitoring and information management – **QuestSuite® for Windows®**. QuestSuite is a powerful, integrated software solution that brings information from all datalogging Quest instruments together in one place.

Quest Technologies is an ISO 9001 Registered Company and A2LA ISO/IEC Guide 25 Accredited Calibration Laboratory, which ensures that every Quest brand instrument is designed, built and serviced with quality and a sincere commitment to customer satisfaction. Our full line of instrumentation includes:

- Sound Level Meters
- Personal Noise Dosimeters
- Heat Stress Monitors
- Audiometer Analyzers
- Bio-Acoustic Simulators
- Octave Band Analyzers
- Indoor Air Quality Monitors
- Gas Detection Monitors
- Vibration Monitors
- Outdoor Noise Monitoring Systems

We invite you to review the information contained in this brochure. You may review our entire line of products by visiting us at www.quest-technologies.com. For additional assistance, please contact our customer service representatives at; (800) 245-0779 within the U.S., Canada & Puerto Rico, (262) 567-9157 elsewhere, fax us at (262) 567-4047 or e-mail us at sales@quest-technologies.com.

QUICK REFERENCE

FEATURES CHART

Choose the Monitor that Best Suits Your Needs	Patriot	SafeTest 90	SafeCheck 100	SafeLog 100	SafeCheck 200	MultiCheck 2000	MultiLog 2000
Monitor Type:							
Personal Single-Gas	•	•	•	•			
Personal Multi-Gas					•	•	•
Go/No-Go	•						
Direct Reading		•	•	•	•	•	•
Automatic Datalogging				•			•
Available Sensors:							
Oxygen		•	•	•	•	•	•
Combustibles (LEL)					•	•	•
Carbon Monoxide	•	•	•	•		•	•
Hydrogen Sulfide	•	•	•	•		•	•
Nitrogen Dioxide		•	•	•		•	•
Chlorine		•	•	•		•	•
Ammonia			•	•		•	•
Hydrogen Cyanide			•	•		•	•
Nitric Oxide			•	•		•	•
Sulfur Dioxide		•	•	•		•	•
Ethylene Oxide			•	•		•	•
Interchangeable Sensors		•	•	•	•	•	•
Smart Sensors			•	•		•	•
Alarm Types:							
Audio	•	•	•	•	•	•	•
Visual	•	•	•	•	•	•	•
Vibrator		•					
Alarm Points:							
High Toxic/LEL/Oxygen		•	•	•	•	•	•
Low Oxygen		•	•	•	•	•	•
Toxic TWA		•	•	•		•	•
Toxic STEL (15 Minute)		•	•	•		•	•
Low Battery		•	•	•	•	•	•
Modes of Operation:							
Pass/Fail	•					•	•
Basic					•	•	•
Industrial Hygiene		•	•	•		•	•
Real Time Clock				•			•
Confidence Chirp/Indicator	•	•	•	•	•	•	•
Automated Electronic Calibration	•		•	•	•	•	•
Records Calibration Events				•			•
Power Sources							
Disposable Alkaline Battery		•	•	•	•	•	•
Lithium		•					
Rechargeable Battery							
Ni-MH					•	•	•
Ni-Cad					•	•	•
Ingress Protection		•	•	•	•	•	•
EMI/RFI Protection	•	•	•	•	•	•	•
Outputs							
RS-232 Serial Printer/Computer				•			•
Parallel Printer				•			•
Available Accessories							
Field Kit Storage Case			•	•	•	•	•
Leather Carry Case			•	•	•	•	•
Calibration Adapter	•	•	•	•	•	•	•
Detachable Hand-Aspirated Pump		•	•	•	•	•	•
Detachable Automated Pump					•	•	•
Single-Unit Charger					•	•	•
Multi-Unit Charger					•	•	•
QuestSuite Software				•			•

Quest Series Gas Detection Monitors

Applications:

- Water and Wastewater Treatment Plants
- Street & Sewer Maintenance
- Fire Safety & Haz Mat Teams
- Building Inspections
- Confined Space
- Mining Industry
- Paper & Pulp Mills
- Food Processing
- Police & Safety Departments
- Landfills & Transfer Stations
- Refineries & Cargo Ships
- Telecommunications & Cable
- Manufacturing
- Municipal Power Utilities



Quest brand personal gas monitors respond to today's most demanding work environments requiring monitors to be extremely rugged, lightweight and simple to operate. With choices spanning the basic protection of the Patriot "go/no-go" alarm monitor to the sophistication of the MultiLog 2000 datalogging multigas monitor, Quest Technologies offers a gas detection solution that is right for you. Regardless of which monitor you choose from Quest, you will receive many years of our trademark red, rugged and reliable performance.

All Quest monitors provide a minimum of audio and visual alerts to real-time gas levels that exceed prescribed limits. Additional alarming functions are available in select models. All Quest monitors permit users to easily and reliably confirm proper calibration and/or perform recalibration in the field. Our most advanced monitors can even notify you when calibration is due. Go/No-Go monitors provide basic protection at the lowest cost per employee. These types of monitors are appropriate where large numbers of workers must be protected simultaneously and time-weighted gas exposures are not of concern. Multigas monitors provide the broadest range of protection from multiple hazards simultaneously. Multigas monitors provide protection at the lowest cost per gas hazard. Datalogging monitors provide detailed information regarding the worker's exposure throughout the day. Datalogging monitors are appropriate where longer term effects of exposure are of concern or where documentation of actual exposures is desired.

Patriot Personal Gas Alarm



The Patriot is an extremely simple-to-use disposable single or dual-gas monitor. It provides visual and audible alarms to warn workers of potentially hazardous concentrations of carbon monoxide (CO) and/or hydrogen sulfide (H₂S). The Patriot's small size and light weight make it ideal for clipping to a shirt pocket, collar or lapel. An optional hard hat mounting adapter is also available.

The Patriot can be purchased as a single-channel CO or H₂S monitor and is the first monitor of its kind available with a dual-channel sensor to detect both CO and H₂S simultaneously. The dual channel sensor has separate sensing electrodes that will detect each gas independently.

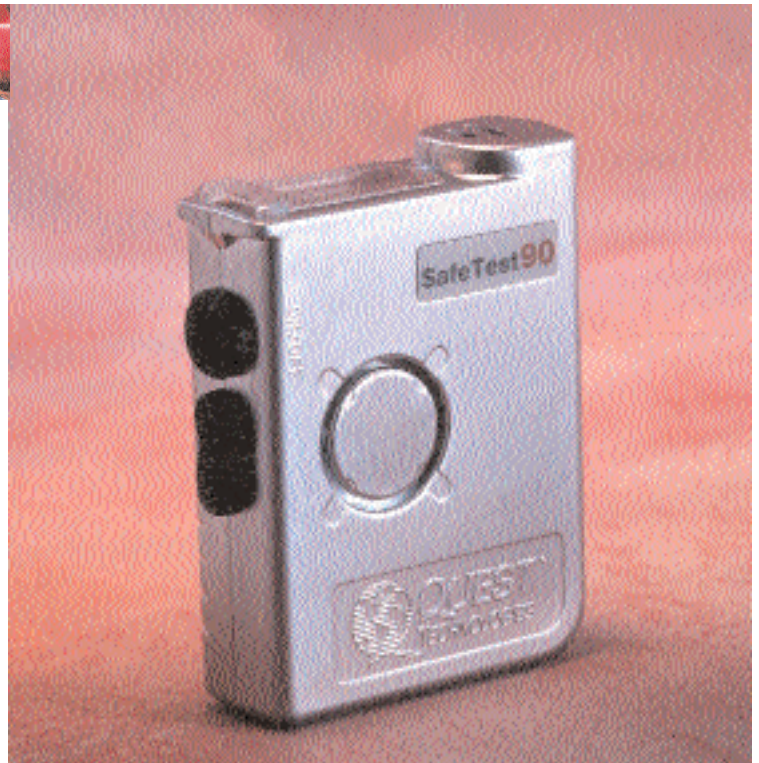
Key Benefits:

- Economically Protect Large Number of Workers
- Unique Dual-Channel Sensor Provides Protection from both CO and H₂S Simultaneously
- Enjoy Worry-Free Ownership with a 2-Year Warranty on Electronics, Sensor and Battery
- Quickly Understand Operating Functions -- No Need for Elaborate Manuals and Formal Training Classes
- Greater User Acceptance Due to Incredibly Small Size and Weight
- Small Design Allows the Patriot to be Mounted in the Breathing Zone, Audible Alarm in the Hearing Zone and the Visual Alarm in the Direct Line of Sight
- Ensure Your Complete and Continuous Satisfaction With a Commitment to Quality Product Design, Manufacture and Service Only Obtainable From an ISO 9001 Registered Company and A2LA ISO/IEC Guide 25 Accredited Calibration Laboratory

SafeTest 90 Portable Single Gas Monitor

The SafeTest 90 is an extremely rugged, lightweight personal single gas monitor for oxygen and one of five toxic gases. The compact design of the SafeTest 90 slips easily into a shirt pocket or clips onto a belt. Quest's unique smart sensor technology allows the user to alternate sensors between O₂ and one of five toxic gases without losing critical calibration information or sensor identifications.

The large, brightly backlit LCD display enables the user to view critical readings in even the most challenging environments. The SafeTest 90 has the loudest pulsating audible alarm available in this type of monitor. Housed in an extremely durable ABS polycarbonate and nickel alloy plated case, the SafeTest 90 gives the user superior RF protection, while withstanding even the most hostile work environments.



Key Benefits:

- Unique Smart Sensor Technology Allows User to Interchange Sensors between O₂ and One of Five Toxic Gas (CO, H₂S, Cl₂, SO₂ & NO₂)
- Increase User Acceptance with Extremely Portable and Compact Design -- Easily Allows User to Slip Unit into Shirt Pocket or Clip onto a Belt
- Increase Work Protection with the Periodic Confidence Chirp -- Lets You Know the Monitor is Functioning Properly
- With Two Individually Programmable Alarm Levels, You Can Set the Unit to Match your Specific Measurement Needs
- Observe Measurements Easily with the Large Backlit LCD, even in Dark Areas
- Minimize Disposable Battery Expense with 5,000 Hours of Operation with a Single 9 Volt Alkaline Battery or 10,000 Hours of Operation with a Single 9 Volt Lithium Battery
- Maximize Worker Protection with the Loudest Audible and Brightest Visual Alarms Available
- Eliminate False Readings due to Radio Frequency Interference and Electromagnetic Interference with the Nickel-Alloy Plated Case
- Ensure Your Complete and Continuous Satisfaction With a Commitment to Quality Product Design, Manufacture and Service Only Obtainable From an ISO 9001 Registered Company and A2LA ISO/IEC Guide 25 Accredited Calibration Laboratory

SafeCheck 100 Portable Single Gas Monitor



The SafeCheck 100 is an extremely rugged, lightweight personal single-gas monitor. The SafeCheck 100 features a large four digit display with backlighting and two tone audio and visual alarms. Powered by a single user-replaceable 9 volt battery that will supply 100 hours of continuous operation, the SafeCheck 100 is designed for today's demanding work environments. With no tools required, batteries can even be replaced wearing gloves.

All SafeCheck 100 operations are easily employed through an oversized 4 - button keypad. Once the unit is activated, it automatically conducts a brief self-check and then proceeds to run mode. Zeroing and calibration functions are only a button away. This translates into uncomplicated, but very reliable instrument operation.

Key Benefits:

- Single Gas Portable Monitor with a Selection of Ten Different Interchangeable Sensors (CO, H₂S, O₂, NH₃, CL₂, HCN, SO₂, NO, NO₂ & ETO)
- Eliminate Operator Errors with Oversized Four-Button Keypad Allows for Easy Unit Operation Even Wearing Gloves
- Increase User Acceptance as Workers can Enjoy the Simple One Button Zeroing and Calibration Functions
- Piercing Two Tone Horn and Flashing Bright LED Alarms Make Sure Alarm Conditions are Recognized
- Minimize Potential for Repairs Caused by Water/Dust with IP54 Rated Design
- Unique Smart Sensor Technology Allows User to Interchange Sensors
- Increase Work Protection with the Periodic Confidence Chirp -- Lets You Know the Monitor is Functioning Properly
- Minimize Disposable Battery Expenses with 100 Hours Alkaline Battery Life
- Quickly Replace Battery without the Use of Tools
- Eliminate False Readings due to Radio Frequency Interference and Electromagnetic Interference Protection with the Nickel Alloy Plated Case
- Ensure Your Complete and Continuous Satisfaction With a Commitment to Quality Product Design, Manufacture and Service Only Obtainable From an ISO 9001 Registered Company and A2LA ISO/IEC Guide 25 Accredited Calibration Laboratory

SafeLog 100 Datalogging Single Gas Monitor

The SafeLog 100 is designed for today's demanding work environments, the unit is rugged, lightweight, and features a large four digit display with backlighting and pulsating warning horn and visual alarms. The SafeLog 100 is protected in an impact resistant ABS housing to take the punishments of real life work conditions. The unit is powered by a user replaceable 9 volt battery that will supply 100 hours of continuous operation.

User flexibility is as simple as selecting from ten different interchangeable electrochemical sensors. The SafeLog 100 measures gas concentration at one sample per second. Featuring an extended memory capacity, it datalogs 60 plus hours (continuous or multiple sessions) of 1 minute historical data. The SafeLog 100 interfaces with QuestSuite for Windows software for fast and convenient data storage, retrieval, analysis, reporting and charting.



Key Benefits:

- Obtain the Benefits of The One & Only System Solution -- QuestSuite for Windows
- Single Gas Portable Monitor with a Selection of Ten Different Interchangeable Sensors (CO, H₂S, O₂, NH₃, CL₂, HCN, SO₂, NO, NO₂ & ETO)
- Workers will Enjoy the Simple One Button Zeroing and Calibration Functions
- Protect Your Workers with a Piercing Two Tone Horn and Flashing Bright LED Alarms
- Minimize Potential for Repairs Caused by Water/Dust with IP54 Rated Design
- Unique Smart Sensor Technology Allows User to Interchange Sensors
- Increase Work Protection with the Periodic Confidence Chirp -- Lets You Know the Monitor is Functioning Properly
- Minimize Disposable Battery Expenses with 100 Hours Alkaline Battery Life
- Quickly Replace Battery without the Use of Tools
- Eliminate False Readings due to Radio Frequency Interference and Electromagnetic Interference Protection with the Nickel Alloy Plated Case
- Ensure Your Complete and Continuous Satisfaction With a Commitment to Quality Product Design, Manufacture and Service Only Obtainable From an ISO 9001 Registered Company and A2LA ISO/IEC Guide 25 Accredited Calibration Laboratory

SafeCheck 200 Portable Two Gas Monitor



The SafeCheck 200 will measure and alarm for hazardous levels of oxygen and combustible gases. Standard features include automatic one button calibration, a safety chirp to indicate to the user that the instrument is functioning, pulsating loud warning horn, flashing visual alarm indicators and an intelligent zero function that prevents the operator from zeroing in a contaminated environment. Simple user selectable alarm levels for low/high O₂ and LEL.

Remote sampling can easily be accomplished by the optional remote sample draw pump that will draw a sample in excess of 50 feet and uses the unit's electronics to sense a flow restriction. Three interchangeable power pack options including standard user replaceable alkaline batteries, rechargeable nickel-cadmium and nickel-metal hydride battery packs offer the ultimate in long battery life.

Key Benefits:

- Two Gas Portable Monitor with a Selection of Ten Different Interchangeable Sensors (CO, H₂S, O₂, NH₃, CL₂, HCN, SO₂, NO, NO₂ & ETO)
- Observe Measurements Up to 50 ft. Away using Optional Sample Draw Pump for Remote Sampling
- Dedicated Confined Space Kits Available to Meet Your Specific Gas Monitoring Applications
- Supports a Variety of Safety Requirements and Regulations with User Selectable Alarm Levels for Low/High O₂ and LEL
- Minimize Disposable Battery Expense with 16 Hour Two "C" Cell Alkaline Battery Pack
- Eliminate Disposable Battery Expense with 10 Hour Rechargeable Nickel Cadmium or Nickel Metal Hydride Battery Packs -- Rechargeable in Less Than Two Hours
- Prevent Unsafe Operation with Intelligent Zeroing Function that Prevents the Operator from Zeroing in a Contaminated Environment
- Unique Smart Sensor Technology Allows User to Interchange Sensors
- Avoid Eye Strain With The Large Easy-To-Read Two Line Alphanumeric Backlighted LCD
- Increase Worker Protection with the Periodic Confidence Chirp -- Lets You Know the Monitor is Functioning Properly
- Minimize Potential for Repairs Caused by Water/Dust with IP54 Rated Design
- Eliminate False Readings due to Radio Frequency Interference and Electromagnetic Interference Protection with the Nickel Alloy Plated Case
- Ensure Your Complete and Continuous Satisfaction With a Commitment to Quality Product Design, Manufacture and Service Only Obtainable From an ISO 9001 Registered Company and A2LA ISO/IEC Guide 25 Accredited Calibration Laboratory

MultiCheck 2000 Portable Multiple Gas Monitor

The MultiCheck 2000 is a non-datalogging, easy-to-operate, rugged personal multi-gas monitor. The unit simultaneously monitors up to four gases from a selection of nine toxic gases, oxygen, and combustible gases. Current concentration levels, peaks, averages, TWA's, STEL's, peak STEL's and minimum and maximum oxygen levels can be easily read from the large backlit LCD. A pulsating loud warning horn and flashing visual alarm clearly indicates the user when alarm conditions exist.

Quest's unique smart sensor technology includes automatic sensor recognition, alarm set points, calibration levels and dates, service dates, temperature compensation information and other valuable data that travels with the sensor from one unit to another.

Standard features include automatic one button calibration, intelligent zero function that prevents the user from zeroing in a contaminated environment, and remote sampling with optional sample draw pump that will draw a sample in excess of 50 feet.



Key Benefits:

- Satisfy a Broad Array of Monitoring Applications with a Selection of O₂/LEL and Two Toxic Gases (CO, H₂S, O₂, NH₃, CL₂, HCN, SO₂, NO, NO₂ & ETO) or O₂ or LEL and Three Toxic Gases (CO, H₂S, O₂, NH₃, CL₂, HCN, SO₂, NO, NO₂ & ETO)
- Unique Smart Sensor Technology Allows User to Interchange Sensors
- Observe Measurements Up to 50 ft. Away using Optional Sample Draw Pump for Remote Sampling
- Dedicated Confined Space Kits are Available to Meet Your Specific Gas Monitoring Applications
- Supports a Variety of Safety Requirements and Regulations with User Selectable Alarm Levels for Low/High O₂ and LEL & Toxics
- Minimize Disposable Battery Expense with 16 Hour Two "C" Cell Alkaline Battery Pack
- Eliminate Disposable Battery Expense with 10 Hour Rechargeable Nickel-Cadmium or Nickel-Metal Hydride Battery Packs -- Rechargeable in Less Than Two Hours
- Prevent Unsafe Operation with Intelligent Zeroing Function that Prevents the Operator from Zeroing in a Contaminated Environment
- Avoid Eye Strain With The Large Easy-To-Read Two Line Alphanumeric Backlit LCD
- Increase Worker Protection with the Periodic Confidence Chirp -- Lets You Know the Monitor is Functioning Properly
- Minimize Potential for Repairs Caused by Water/Dust with IP54 Rated Design
- Eliminate False Readings due to Radio Frequency Interference and Electromagnetic Interference Protection with the Nickel Alloy Plated Case
- Ensure Your Complete and Continuous Satisfaction With a Commitment to Quality Product Design, Manufacture and Service Only Obtainable From an ISO 9001 Registered Company and A2LA ISO/IEC Guide 25 Accredited Calibration Laboratory



The MultiLog 2000 is a lightweight, compact personal multi-gas monitor that simultaneously measures up to four gases from a selection of nine toxic gases, oxygen and combustible gases.

Quest's unique smart sensor technology includes automatic sensor recognition, alarm set points, calibration levels and dates, service dates, temperature compensation information and other valuable data that travels with the sensor from one unit to another.

The MultiLog 2000 has three user selectable modes of operation, each providing a varying amount of information accessible through the display; Pass/Fail, Basic and Industrial Hygiene. The unit stores concentration level, STEL, TWA, average level over total run time, peak level, peak STEL, and temperature.

The MultiLog 2000 has an extended memory capacity for storing information while in the RUN mode. There are three ways of logging; summary data for the session, continuous, or action level triggered. The MultiLog 2000 interfaces with QuestSuite for Windows software for fast and convenient data storage, retrieval, analysis, reporting and charting.

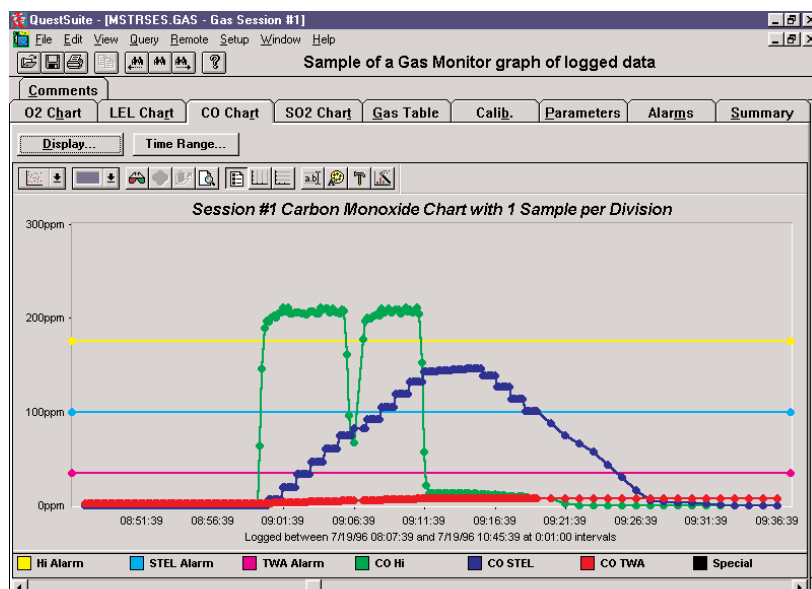
Key Benefits:

- Obtain the Benefits of The One & Only System Solution -- QuestSuite for Windows
- Satisfy a Broad Array of Monitoring Applications with a Selection of O₂/LEL and Two Toxic Gases (CO, H₂S, O₂, NH₃, CL₂, HCN, SO₂, NO, NO₂ & ETO) or O₂ or LEL and Three Toxic Gases (CO, H₂S, O₂, NH₃, CL₂, HCN, SO₂, NO, NO₂ & ETO)
- Unique Smart Sensor Technology Allows User to Interchange Sensors
- Observe Measurements Up to 50 ft. Away using Optional Sample Draw Pump for Remote Sampling
- Dedicated Confined Space Kits are Available to Meet Your Specific Gas Monitoring Applications
- Supports a Variety of Safety Requirements and Regulations with User Selectable Alarm Levels for Low/High O₂ and LEL & Toxics
- Minimize Disposable Battery Expense with 16 Hour Two "C" Cell Alkaline Battery Pack
- Eliminate Disposable Battery Expense with 10 Hour Rechargeable Nickel-Cadmium or Nickel-Metal Hydride Battery Packs -- Rechargeable in Less Than Two Hours
- Prevent Unsafe Operation with Intelligent Zeroing Function that Prevents the Operator from Zeroing in a Contaminated Environment
- Avoid Eye Strain With The Large Easy-To-Read Two Line Alphanumeric Backlighted LCD
- Increase Worker Protection with the Periodic Confidence Chirp -- Lets You Know the Monitor is Functioning Properly
- Minimize Potential for Repairs Caused by Water/Dust with IP54 Rated Design
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Data Management & Analysis Software

The Heart of "The **ONE & ONLY** System Solution"

If your monitoring applications include requirements to retain, retrieve, analyze or report data acquired by your Quest datalogging instrumentation, then *QuestSuite for Windows* is what you need. *QuestSuite* is comprised of multiple "applets" individually addressing specific safety & industrial hygiene disciplines and bringing them together into one user interface. Current applets include heat stress monitoring, noise dosimetry, sound and vibration analysis, indoor air quality assessment, toxic/combustible gas monitoring and audiometric testing. Regardless of which applet you are using, *QuestSuite* has everything you need to capture, retrieve, analyze, chart, report, archive & export logged monitoring data. All *QuestSuite* applets allow you to:



- Download data from the instrument
- Get instant access to all your important monitoring information
- Generate automated charts & reports fast & easy
- Chart data with the graph style you select, choosing the information that you want to display
- Configure test setups & program instruments with "point and click" ease
- Store instrument setup files for quick and easy reuse
- Append comments to monitoring results
- View and print text reports and graphical charts
- Annotate charts with free-form comments
- Add comments to specific data points for future reference
- Export data to other programs
- Obtain version updates via the Internet

QuestSuite for Windows – Gas Applet

The *QuestSuite* Gas Applet supports the SafeLog 100 and MultiLog 2000 Datalogging Gas Detection Monitors. The Gas Applet additionally allows you to:

- Graphically compare synergistic effects of employee gas and noise exposures
- Preview and tailor specific data for employee notification reports
- Select and chart critical peak exposure data in specific time ranges
- Query database for multiple incidents of employee exposure data



MultiCharger II

The MultiCharger II is designed to completely recharge the battery pack in less than two hours. Once the battery pack is fully charged, it switches to a trickle charge and maintains the battery pack in a ready-to-use state, while at the same time avoiding damage from overcharging. An additional discharge/charge mode, allows periodic exercising of the battery pack's recharge cycle, which further maximizes the life of the battery pack and minimizes the potential of battery memory build-up. The MultiCharger II can be used with the MultiLog 2000, MultiCheck 2000 and SafeCheck 200.

The QTP-2000 Sample-Draw Pump easily attaches to the MultiLog 2000, MultiCheck 2000 and SafeCheck 200 to allow critical testing of a confined space prior to entry. The rugged sample gas probe contains a replaceable hydrophobic filter to prevent moisture, dust and large particles from entering the pump. In addition, when liquid is drawn into the pump hose, a low flow alarm alerts the user and shuts down the pump.



QTP-2000

Sensor Specifications

	Range	Resolution	Response Time	Accuracy	Operating Temp. Range	Storage	Operating Humidity Range	Warranty Period	Life Expectancy
Ammonia	0-50 ppm	1 ppm	<150 sec	+5%	-25°C to +30°C	Cool Dry Environment	15 to 90% RH Non-Condensing	1 Year	2 Years
Carbon Monoxide	0-999 ppm	1 ppm	≤25 sec	+5%	-20°C to +50°C	Cool Dry Environment	15 to 90% RH Non-Condensing	2 Years	2 Years
Chlorine	0-20 ppm	0.1 ppm	<60 sec	+5%	-20°C to +50°C	Cool Dry Environment	15 to 90% RH Non-Condensing	1 Year	2 Years
Ethylene Oxide	0-20 ppm	0.1 ppm	<120 sec	+5%	-20°C to +50°C	Cool Dry Environment	15 to 90% RH Non-Condensing	1 Year	2 Years
Hydrogen Cyanide	0-50 ppm	0.5 ppm	<200 sec	+5%	-20°C to +50°C	Cool Dry Environment	15 to 90% RH Non-Condensing	1 Year	2 Years
Hydrogen Sulfide	0-500 ppm	1 ppm	≤30 sec	+5%	-40°C to +50°C	Cool Dry Environment	15 to 90% RH Non-Condensing	2 Years	2 Years
LEL	0-100%	1%	≤15 sec	+5%	-20°C to +50°C	Cool Dry Environment	0 to 99% RH Non-Condensing	2 Years	2 Years
Nitrogen Dioxide	0-50 ppm	0.1 ppm	<25 sec	+5%	-20°C to +50°C	Cool Dry Environment	15 to 90% RH Non-Condensing	1 Year	2 Years
Nitric Oxide	0-100 ppm	0.5 ppm	<20 sec	+5%	-20°C to +50°C	Cool Dry Environment	15 to 90% RH Non-Condensing	1 Year	2 Years
Oxygen	0-30%	0.1%	≤15 sec	+5%	-20°C to +50°C	Cool Dry Environment	0 to 99% RH Non-Condensing	2 Years	2 Years
Sulphur Dioxide	0-50 ppm	0.1 ppm	≤35 sec	+5%	-20°C to +50°C	Cool Dry Environment	15 to 90% RH Non-Condensing	1 Year	2 Years

Note: Repeatability on all sensors is <2% of signal

PRODUCT SPECIFICATIONS

	Patriot	SafeTest 90	SafeCheck100	SafeLog 100
Number of Sensor Channels	Single or Dual	Single	Single	Single
Display Type	_____	Backlit LCD	Custom Backlit LCD	Custom Backlit LCD
Case Material	Polycarbonate	ABS Polycarbonate & Nickel Alloy Plated	ABS Polycarbonate & Nickel Alloy Plated	ABS Polycarbonate & Nickel Alloy Plated
Environmental				
Operating Temp. Range	-4 to +122° F (-20 to +50°C)	14 to 104°F (-10 to +40°C)	14 to 104°F (-10 to +40°C)	14 to 104°F (-10 to +40°C)
Storage Temp. Range	-4 to +122° F (-20 to +50°C)	5 to 140°F (-15 to +60°C)	5 to 140°F (-15 to +60°C)	5 to 140°F (-15 to +60°C)
Humidity Range	15 to 90% RH, non-condensing	0 to 90% RH, non-continuous, non-condensing 15 to 90% RH continuous, non-condensing	0 to 90% RH, non-continuous, non-condensing 15 to 90% RH continuous, non-condensing	0 to 90% RH, non-continuous, non-condensing 15 to 90% RH continuous, non-condensing
Power				
Battery Life				
Alkaline	2 Yrs	5,000 Hrs.	100 Hrs.	100 Hrs.
Lithium	_____	10,000 Hrs.	_____	_____
Ni-MH	_____	_____	_____	_____
Ni-Cad	_____	_____	_____	_____
Recharge Time				
Lithium	_____	_____	_____	_____
Ni-MH	_____	_____	_____	_____
Ni-Cad	_____	_____	_____	_____
Mechanical				
Size	2.3 x 1.6 x 1.4" (5.8 x 4.1 x 3.5cm)	1.3 x 3.0 x 3.9" (3.3 x 7.6 x 9.9cm)	4.5 x 3.0 x 1.5" (11.4 x 7.6 x 3.8cm)	4.5 x 3.0 x 1.5" (11.4 x 7.6 x 3.8cm)
Weight	4 oz. (113.4g)	6.3 oz. (180g)	8.8 oz. (250g)	8.8 oz. (250g)
Applicable Standards				
Ingress Protection	IP20	IP54	IP54	IP54
RFI/EMI Protection Rating	EN55022 Class B EN 50082-1	ANSI C95.1-1982 & EN50082-2	ANSI C95.1-1982 & EN50082-2	ANSI C95.1-1982 & EN50082-2
Performance				
Intrinsic Safety	Class I,II,III Div. 1 Groups A,B,C,D,E,F,G	Class I,II,III Div. 1 Groups A,B,C,D,E,F,G EEx ia I/IIc T4	Class I,II,III Div. 1 Groups A,B,C,D,E,F,G EEx ia IIC T4	Class I,II,III Div. 1 Groups A,B,C,D,E,F,G EEx ia IIC T4
CE Mark	Yes	Yes	Yes	Yes
Warranty Period	2 Yrs.	2 Yrs.	2 Yrs.	2 Yrs.

PRODUCT SPECIFICATIONS

	SafeCheck 200	MultiCheck 2000	MultiLog 2000
Number of Sensor Channels	Two	Four	Four
Display Type	2-Line Backlit LCD	2-Line Backlit LCD	2-Line Backlit LCD
Case Material	ABS Polycarbonate & Nickel Alloy Plated	ABS Polycarbonate & Nickel Alloy Plated	ABS Polycarbonate & Nickel Alloy Plated
Environmental			
Operating Temp. Range	14 to 104°F (-10 to +40°C)	14 to 104°F (-10 to +40°C)	14 to 104°F (-10 to +40°C)
Storage Temp. Range	5 to 140°F (-15 to +60°C)	5 to 140°F (-15 to +60°C)	5 to 140°F (-15 to +60°C)
Humidity Range	0 to 90% RH, non-continuous, non-condensing 15 to 90% RH continuous, non-condensing	0 to 90% RH, non-continuous, non-condensing 15 to 90% RH continuous, non-condensing	0 to 90% RH, non-continuous, non-condensing 15 to 90% RH continuous, non-condensing
Power			
Battery Life			
Alkaline	16 Hrs.	16 Hrs.	16 Hrs.
Lithium	_____	_____	_____
Ni-MH	10 Hrs.	10 Hrs.	10 Hrs.
Ni-Cad	10 Hrs.	10 Hrs.	10 Hrs.
Recharge Time			
Lithium	_____	_____	_____
Ni-MH	2 Hrs.	2 Hrs.	2 Hrs.
Ni-Cad	2 Hrs.	2 Hrs.	2 Hrs.
Mechanical			
Size	6.9 x 3.4 x 2.0" (17.5 x 8.6 x 5.1cm)	6.9 x 3.4 x 2.0" (17.5 x 8.6 x 5.1cm)	6.9 x 3.4 x 2.0" (17.5 x 8.6 x 5.1cm)
Weight	22 oz. (0.6kg)	22 oz. (0.6kg)	22 oz. (0.6kg)
Applicable Standards			
Ingress Protection	IP54	IP54	IP54
RFI/EMI Protection Rating	ANSI C95.1-1982 & EN50082-2	ANSI C95.1-1982 & EN50082-2	ANSI C95.1-1982 & EN50082-2
Performance	_____	_____	_____
Intrinsic Safety	Class I,II,III Div. 1 Groups A,B,C,D,E,F,G EEx ia IIC T4, MSHA 2G Australia (SIMTARS)	Class I,II,III Div. 1 Groups A,B,C,D,E,F,G EEx ia IIC T4, MSHA 2G Australia (SIMTARS)	Class I,II,III Div. 1 Groups A,B,C,D,E,F,G EEx ia IIC T4, MSHA 2G Australia (SIMTARS)
CE Mark	Yes	Yes	Yes
Warranty Period	2 Yrs.	2 Yrs.	2 Yrs.

Technical Services from Quest

At Quest Technologies our commitment to seeing our customers delighted is further demonstrated by the quality technical services we offer in support of our many valued customers. Quest educational seminar information and schedules along with our web-based re-certification, repair and rental services can be reviewed at www.quest-technologies.com.



Quest Service Department

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- Receive automatic 1-year renewal of the original factory warranty with your recertification
- Enjoy the highest quality recertification services available with our A2LA ISO/IEC Guide 25 Accredited Calibration Laboratory
- Maintain the integrity and defensibility of your monitoring program with documented traceability to appropriate standards

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- Noise Measurement & Hearing Conservation
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