

# Model 8222

## Analyzer Calibrator

### Features & Benefits

- Separate Low Pressure and High Pressure Inputs
- Separate Low Flow and High Flow Inputs
- Remote Viewing and Control
- Comprehensive Analysis Tools
- Dual USB Ports
- Dual RS-232 Serial Comm Ports
- 10/100Base-T Ethernet
- Analog XGA Output
- S-Video & Composite Video NTSC/PAL Outputs
- 100 Gigabyte Hard Disk Storage
- Data Acquisition Subsystem
- Open Windows XP® Platform
- Universal AC Power Input
- Compact and Lightweight
- Robust Construction
- Keyboard, Interface Cables, Mouse, and Mouse Pad Included



The Model 8222 Analyzer/Calibrator is a precision traceable reference standard used to analyze gas flows and pressures either locally or via a remote LAN/WAN connection. This comprehensive test system can save manufacturers a significant amount of time and money in maintaining their equipment. Customer uptime is maximized since equipment no longer needs to be returned to the manufacturer for calibration. Similarly, manufacturers no longer need to provide loaner equipment for their customers, arrange for shipping and logistics, and warehousing of customer equipment.

The instrument's front and rear panel layouts are clear, logical, and non-intimidating to the first time user. The platform is based on the Microsoft Windows XP® Operating System and intuitive Graphical User Interface. This minimizes the amount of time required to master system operation and provides maximum software stability. A mouse, keyboard, and monitor are attached to perform local analysis and calibration while a LAN/WAN connection is all that is needed to perform remote analysis and calibration of customer equipment.

Although dedicated to making accurate flow and pressure measurements, other applications such as MS Word® or Excel®, MATLAB® and LabVIEW® can be installed on the instrument to accomplish local documentation or data analysis. Provisions for connection to devices under test, bar-code readers, webcams, external networks, peripherals, and video displays further enhance the system's versatility. A multichannel data acquisition and storage sub-system is also included. Stored data may be easily retrieved via the system's integral USB or Ethernet connections.

The instrument is robust in construction and meets or exceeds all applicable US and EU electrical safety and environmental standards.

UTILITIES		DESCRIPTION
Flow	Low Flow: $\pm 15$ LPM FS, High Flow: $\pm 200$ LPM FS with Selectable Full Scale Range	
Pressure	Low Pressure: $\pm 150$ cmH <sub>2</sub> O FS, High Pressure: $\pm 150$ PSIG FS with Selectable Full Scale Range	
Units of Measure	Flow: LPM, CFM Pressure: cmH <sub>2</sub> O, inH <sub>2</sub> O, mmHg, kPa, mBar, Bar, PSIG, ATM	
Compensation	Tidal Volume: L, CF Rate: BPM, CPM, CPS Ti, Te: Seconds I:E : Ratio FIO <sub>2</sub> : Percent	
Gas Type	None, ATP, STP, BTPS	
Filter Type	Air, Air/O <sub>2</sub> , other gases available upon request	
DISPLAYS		DESCRIPTION
Pressure	Low Pressure and High Pressure Time Domain Displays with Selectable Time and Amplitude Scales	
Flow	Low Flow and High Flow Time Domain Displays with Selectable Time and Amplitude Scales	
Ventilation/Breath Rate	Numerical display of frequency at either Low Flow or High Flow front panel connection	
Inspiration Time (Ti)	Numerical display of the inspiratory time at the selected Low Flow or High Flow front panel connection	
Exhalation Time (Te)	Numerical display of the expiratory time at the selected Low Flow or High Flow front panel connection	
I:E Ratio	Numerical display of Ti/Te ratio at the selected Low Flow or High Flow front panel connection	
FL <sub>0.2</sub>	Numerical display of the oxygen content of the monitored gas applied to the front panel oxygen sensor connection	
Tidal Volume	Numerical display of volume at the selected Low Flow or High Flow front panel connection	
Minute Volume	Numerical display of minute volume at the selected Low Flow or High Flow front panel connection	
Barometric Pressure	Numerical display of barometric pressure	
Clock Calendar	Clock calendar used for the display of system time and date, time/date stamping acquired data files, reference for instrument calibration interval	
SYSTEM		DESCRIPTION
External Connections	2 RS-232 Serial Communication 2 USB 1.1 Compliant 1 10/100BASE-T Fast Ethernet 1 Analog XGA 1 S-Video (NTSC or PAL configurable) 1 Composite Video (NTSC or PAL configurable)	
Display Type	External Analog XGA Monitor, External Composite Video Monitor, External S-Video Monitor	
Serial Connectivity	2 RS-232 Serial Communication 2 USB 1.1 Compliant 1 10/100BASE-T Fast Ethernet	
Operating System	Microsoft Windows XP®	
Data Storage	100 Gigabyte Hard Disk Drive	
Input Devices	External Mouse, External Keyboard	
Power Input	IEC-320 Power Input Connector 90-264 VAC 47-63 Hz Single Phase 25 Watts Maximum 1 Amp Fuses	
Dimensions	6.25" h x 13.75" w x 14.25" d (160mm x 350mm x 362mm) with protrusions	
Weight	5.3 lbs. (2.4 Kg)	
Environmental	Operating Temperature 0 – 40°C (32 – 104°F) Operating Humidity 0-90% Relative Humidity, Non-condensing	
Supplied Accessories	Mouse, two button Mouse Pad, non-skid rubber backed Keyboard, with replaceable protective membrane Power Cord, 10 ft. shielded, with hospital-grade plug Operator's Manual Handles for portability Tilt-Up Feet for viewing convenience	

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US and Foreign Patents Pending

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