



microPHAZIR™ Handheld Material Analyzer

Overview

The Polychromix microPHAZIR™ is our second generation handheld NIR material analyzer designed for rapid, non-destructive, on-the-spot analysis. Near Infrared (NIR) has never been this portable, powerful, and easy. Just select the application, point and shoot, and have results in seconds. Engineered by the leaders in portable NIR to satisfy both non-experts and specialists requirements. Our microPHAZIR™ unleashes the power of NIR spectroscopy enabling real time, on-site analysis with minimal training.

Features

- Ultra-portable 2.7 lbs handheld
- Intuitive color LCD screen
- Rechargeable Li-Ion batteries
- Proven extreme reliability
- Ergonomically balanced pistol design for low-fatigue single-hand operation

New Features

- Dust proof and water resistant
- Rear LCD display
- Automated reference
- Internal automatic calibration
- Mixture analysis function
- Audio feedback
- Multi-component quantitative analysis

Applications

- Law enforcement & customs inspection
- Narcotics & explosives screening
- Raw-material identification
- Counterfeit and adulterated products
- Agriculture and food analysis

Ease of Use

- Simple point-and-shoot operation
- Results in seconds
- Minimal training required
- Qualitative & quantitative capabilities
- Liquids, pastes, solids powders, and gels
- Fully programmable for customs applications

Compliance

- Full regulatory compliance
- Integrated self-test & diagnostics
- Training & consulting services
- Global sales & support network
- ISO 9001, CE Approved

Safety

- **NO LASER** means the microPHAZIR™ is safe for operators and materials
- Eliminates unnecessary safety risks and costly laser safety training



Typical raw material Identification result



microPHAZIR™ Commercial Application Libraries include:

- Narcotics & Controlled Substances
- Explosive Materials
- Feed Ingredients
- Pharmaceutical Ingredients
- Textiles & Fibers
- Plastics
- Asbestos Screening

Custom Applications can be made using the Polychromix Method Generator software. This PC based software allows developers to extend commercial libraries or generate completely new applications tailored to your unique requirements. The software is straightforward and easy learn. It is the hassle-free way to apply microPHAZIR™ to today's ever changing requirements.

Methods developed for PHAZIR™ and microPHAZIR™ are completely interchangeable.

Robustness & Reliability is critical for portable analyzers. PHAZIR™ and microPHAZIR™ family have a track record of extreme reliability even in the harshest environments. Polychromix engineers designed these systems to meet the most demanding requirements of leading manufacturing, law enforcement, and even NASA space qualification specifications, ensuring our customers years of trouble free operation.

Mixture Analysis permits advanced real-time analysis of multi-component samples.. samples which consist of mixtures of 2 or more materials. The Polychromix Mixture Analysis function is invaluable for analysis of real world mixtures such as often explosives and street narcotics.

Reports and Data Compatibility

Data from the microPHAZIR™ can be transferred to a PC via an integrated USB port in order generate customizable reports or to interface to LIMS or other database systems.

Specifications	
Principle of Operation	Non-destructive chemical analysis via Near Infrared Spectroscopy
Weight	2.7 lbs
Light Source	Tungsten light bulb, safe for operators and sample integrity
Spectral Range	1600 – 2400 nm (including the complete near-infrared combination region and first overtone region)
Measurement time	User-definable. Typical 3 seconds or less
Internal data storage	All readings stored in internal memory and can be downloaded to PC
Data Download	Transfer data in text based files to a PC via USB connection. Easily transfer data to all types of applications.
Security	User selectable password protection with multiple security levels.
Operating conditions	Temperature range 40 ^o to 125 ^o F (5 ^o to 50 ^o C)
Batteries	Quick-change, rechargeable lithium-ion battery pack. AC battery charger included.
Housing	High-strength, dust proof/splash proof plastic housing
Standard accessories	<ul style="list-style-type: none">▪ Rugged waterproof carrying case, 110/220 VAC battery charger/adaptor▪ PC Interface cable, Documentation CD, Safety Lanyard