

# Particle Insight Raptor Portable Particle Shape and Size Analyzer



**Brand:** Vision Analytical  
**Product Code:** 365-11  
**Availability:** Call for availability

## Description

The Pi Raptor Portable is a robust particle size and shape analyzer, ideal for the drilling mud and Lost Circulation Material (LCM) industry. Encased in a durable, carry-on case, it ensures high-resolution analysis on-site or in the lab. Utilizing advanced Dynamic Image Analysis, it delivers precise, reliable data crucial for optimizing drilling fluid properties and LCM performance. The innovative “Raptor” architecture enhances image quality and functionality, while its sample handling capabilities support both field analysis and on-line applications.

With the all-new Dry Powder Module, you can now get the same advanced image analysis for dry powders. To learn more, watch this video:

Unique features include:

- Portability- Contained in a durable ruggedized case paired with its own battery power supply and cooling system, the PI raptor is designed for use in harsh environments.
- Wide Measurement ranges available
  - Fine Drilling mud version: 1 to 300  $\mu$ m
  - Standard Drilling Mud version: 10 to 800  $\mu$ m
  - LCM version: 40 to 3000  $\mu$ m
- Robust data visualization - The tools and features available include:

- Correlation plots
- Distribution plots
- Classification tools
- Manufacturing pass/fail capability
- Particle concentration
- Not just pretty pictures - Besides having industry best image quality, the Pi Raptor Portable has many tools that help any operator to make easy decisions on their process. Thumbnail images offer objective evidence. No experts needed.
- Real Time results - The raptor portable can deliver results in minutes so that you may make decisions right then and there
- Shape, size, concentration, and thumbnail images of all analyzed particles.
- Number-based measurement. No minimum concentration limit.
- Flexible fluid design allows for various sample suspension options including on-line.
- Disposable / interchangeable flow cells.
- Correlation Plots to identify and view rare event particles and trends.
- Sieve Correlation offers data reporting referencing sieve results for easy technology comparison.
- On-line continuous process monitoring capability.
- Ruggedized case and battery operated for field or lab use.
- All raw images saved allows reanalysis of captured data.
- Full particle count codes compliant to ASTM, ISO, and NAVAIR oil wear particle requirements.
- Includes embedded Microsoft Surface Pro computer with touch-screen.
- Overlay data for sample-to-sample or lot-to-lot comparisons.
- Smart phone App allows remote real-time monitoring.