



PAC | solid partners
proven solutions



ISL VIDA Density Meter

Accurate, precise, and automated density analysis of liquids

- 🌐 Proven Technology With Automation for Enhanced Performance
- 🌐 Ease of Use for Increased Laboratory Efficiency
- 🌐 Compliant with ASTM D4052, ASTM D5002, ASTM D5931, ISO 12185, ISO 15212-1, DIN 51757 and JIS K2249-1

ISL VIDA Density Meter

PROVEN AUTOMATED TECHNOLOGY WITH THE HIGHEST LEVEL OF QUALITY COMPLIANCE

The VIDA density meter provides accurate and repeatable density analysis for a wide range of liquids according to ASTM D4052. It combines the proven oscillating U-tube technology with unique automated features such as bubble detection and sample injection. This automation improves repeatability, ease of use, and laboratory efficiency to achieve the highest level of quality compliance.

KEY ADVANTAGES

PROVEN TECHNOLOGY FOR ENHANCED PERFORMANCE

Advanced technology based on robust oscillating U-tube

- Can withstand aggressive samples and solvents due to unique stainless steel cell
- Better repeatability due to push-piston automatic vertical sample injection that mimics manual direct injection
- No operator visual check required due to automated bubble detection
- A reference oscillator allows for better stability (VIDA 80H)
- Maintain the apparatus inlets/outlets warm up to 70°C
- Internal waste circuit also kept warm
- Prevent freezing of the sample during whole test cycle run

EASE OF USE FOR INCREASED LABORATORY EFFICIENCY

True “push button” solution requiring minimal training or analytical knowledge

- Perform accurate density analysis with only 3 steps: sample loading, measurement and cleaning
- Automatic cleaning reduces cleaning time and consumption of solvents, even for difficult samples
- Intuitive smart software that displays test progress in real time
- Quick and advanced test setup for quality control and customized tests
- Integrated tables for automatic conversions of density output for API crude oil, refined products, lubricants, alcohols, acids, alkalis and sugars (VIDA 80H)
- Customizable tables

HIGH LEVEL OF COMPLIANCE

Immediate access to critical information

- Programmable duplicate measurement in one test run for more accurate analysis
- Automatic pass/fail validation
- Quality control chart shows when calibration adjustment is required
- Troubleshoot system with event log and diagnostic features
- IRIS/LIMS capability
- Compliant with ASTM D4052, ASTM D5002, ASTM D5931, DIN 51757, ISO 12185, ISO 15212-1 and JIS K2249-1.

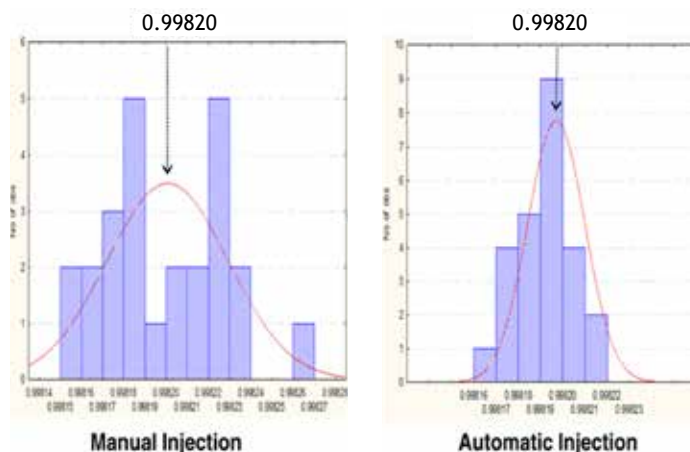
“We chose the VIDA because we got more for our money. Our technicians are extremely pleased with its ease of use and fast analysis. It is extremely simple to start a sample since it only takes 60 seconds of hands on time for sample prep to start the test. All we do is put in the syringe and hit go.”

Ralph Guidry
Chemist, Valero Refinery Lab

IMPROVED REPEATABILITY

With the higher accuracy and repeatability of the VIDA density results, operators are able to run their processes tighter to the specification limits.

The graphs on the right compare results of a manual injection density meter and the automated VIDA analyzing ~25 consecutive tests of the same sample.



FULLY AUTOMATED RELIABILITY

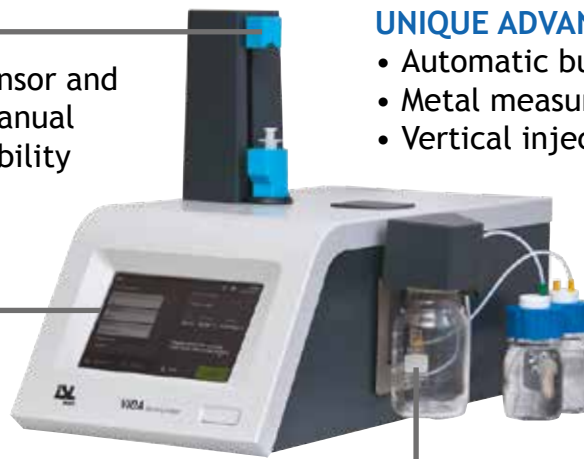
VIDA's high level of automation –powered by embedded smart software– allows non-assisted operation during the whole test cycle, providing a significant reduction of operators' workload, together with repeatable and consistent measurements one can rely on.

AUTOMATIC SAMPLE INTRODUCTION

- Push-piston with automatic force sensor and viscosity correction simulates the manual direct injection with better repeatability
- Adjust injection speed to prevent errors due to air bubbles

INTUITIVE TOUCH SCREEN

- Real-time display of test progress
- Easy configuration of test methods
- Straightforward navigation menu



UNIQUE ADVANCED FEATURES

- Automatic bubble detection
- Metal measuring cell
- Vertical injection

SELF-CONTAINED SYSTEM

- No risk of sample cross-contamination
- Minimal operator exposure to solvents
- Optimal VOC emissions control

APPLICATIONS

REFINING & PETROCHEMICAL INDUSTRIES

Light and Mid Distillates - VIDA 40

- Gasoline
- Diesel
- Jet fuel

Heavy Oils - VIDA 40H & VIDA 80H

- Residual wax fractions
- Paraffin crude oil
- Heavy fuel oil
- Bitumen samples

INDUSTRIAL, PHARMACEUTICAL, FOOD AND BEVERAGE INDUSTRIES

VIDA 80H

- Sugar and alcohol content
- Solvents
- Dyes
- Surfactants
- Glycols

SPECIFICATIONS

VIDA™ Density Meters	VIDA 40	VIDA 40H	VIDA 80H	VIDA 40SC	VIDA 40SCH	VIDA 80SCH
Analytical Principle	Oscillating U-Tube					
Measurement Range	0 to 3 g/cm ³					
Temperature Range	0°C to +100°C (32 to 212°F)					
Pressure Range	0 to 10 bar (0 to 145 psig)					
Temperature Accuracy	0.03°C	0.01°C	0.01°C	0.03°C	0.01°C	0.01°C
Density Accuracy	0.0001 g/cm ³	0.00005 g/cm ³	0.00005 g/cm ³	0.0001 g/cm ³	0.00005 g/cm ³	0.00005 g/cm ³
Density Repeatability s.d.	0.00002 g/cm ³	0.00001 g/cm ³	0.00001 g/cm ³	0.00002 g/cm ³	0.00001 g/cm ³	0.00001 g/cm ³
Operation						
User Interface	7-inch Color TFT Touch Screen					
Sample Loading	Automatic by push piston					
Sample Changer	No			Yes		
Sample Keep Warm	No	Yes		No	Yes	
Bubbles Detection	Automatic (by pressure)					
Cleaning and Drying	Automatic (by two solvents)					
Viscosity Correction	No	Yes		No	Yes	
Temperature Compensation	Yes (API conversion acc. to ASTM-D1250)					
Tables (alcohol, acid, alkali, sugar, customizable)	No	Option	Yes	No	Option	Yes
Calibration	By Air / Water	Multi-Temp		By Air / Water	Multi-Temp	
Results Management						
Documentation	Results instant report in g/ml ; kg/m ³ ; Rel. Density; °API. Detailed report on local screen; Print-out reports					
Statistics	Auto calculation of max/min. values; mean and sdt. dev.					
Built-in Local Memory	2GB non removable SD card. Up to 40 products with associated specification. Up to 200 complete test results.					
Special functions	Pass/Fail Indication; QC chart; Event Log; 2x Measurement					
PAC IRIS Software features	Run Control; Result Management; Reporting; Quality Control					
Communication Interface	2 x USB, Ethernet, 1 x RS-232					
PC Software	Windows based PC software is available for data acquisition, database management, results comparison, run control, flexible LIMS protocols and other functions					
Ambient Conditions	Operation: 10 to 35°C (50 to 95°F) - Humidity: 20 to 85% (not condensing)					
Power Requirement	AC 100 to 240V; 50/60Hz; 400W					
Dimensions (W x L x H)	251 x 405 x 375 mm (9.9 x 15.9 x 14.7 inches)			331 x 540 x 375mm (13 x 21 x 15 inch)		
Weight	16,8 kg (37.3 pounds)			20kg (44 pounds)		
Patents and Certifications	Fr. Patents #1055362, #1055357, #1055354 - CE & CSA Certifications					

ABOUT PAC

PAC develops advanced instrumentation for lab and process applications based on strong **Analytical Expertise** that ensures **Optimal Performance** for our clients. Our analyzers help our clients meet complex industry challenges by providing a low cost of ownership, safe operation, high performance with fast, accurate, and actionable results, high uptime through reliable instrumentation, and compliance with standard methods.

Our solutions are from industry-leading brands: AC Analytical Controls, Advanced Sensors, Alcor, Antek, Herzog, ISL, Cambridge Viscosity, PSPI, and PetroSpec. We are committed to delivering superior and local customer service worldwide with 16 office locations and a network of over 50 distributors. PAC operates as a unit of Roper Industries, Inc., a diversified growth company and a constituent of S&P 500, Fortune 1000, and Russell 1000 indices.

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