

Fully Automated Digital Density Meter

VIDA™ Density Meter


www.paclp.com




by PAC

High Reliability in Density Measurement

- Fully Automated Operation at the Push of a Button
 - Built-in Automatic Bubble Detection
- Unique and Innovative Design with Multiple Configurations
- Compliant with in compliance with ASTM D4052, ASTM D5002, ASTM D5931, ISO 23296 (IP365), ISO 15212-1, DIN 51757 and JIS K2249-1

VIDA™, FULLY AUTOMATED AND RELIABLE DENSITY ANALYSIS

The ISL VIDA™ density meter offers unmatched reliability in density measurement through a very user-friendly, fully automated, one button-push operation. The VIDA™ is based on the proven oscillating U-tube method and integrates innovative features that ensure reliable and accurate analysis of crude oil & petroleum products – from volatile to the highly viscous ones – in compliance with AASTM D4052, ASTM D5002, ASTM D5931, ISO 23296 (IP365), ISO 15212, DIN 51757, JIS K2249. Its high level of automation – powered by embedded smart software – allows non-assisted operation during the whole test cycle, therefore a significant reduction of operators' workload, together with repeatable and consistent measurements one can rely on.

UNIQUE ADVANCED FEATURES

- Automatic bubble detection
- Metal measuring cell
- Ultrasonic cleaning device

AUTOMATIC SAMPLE INTRODUCTION

- Push-piston simulates the manual direct injection, with better repeatability
- Adjust injection speed to prevent errors due to air bubbles



INTUITIVE TOUCH SCREEN INTERFACE

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

SELF-CONTAINED SYSTEM

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

ADVANCED TECHNOLOGY - HIGH RELIABILITY

UNIQUE BUILT-IN AUTOMATIC BUBBLE DETECTION

VIDA™ features a unique built-in automatic bubble detection system:

- Operator visual check not required
- Not affected by bubble size or sample opacity
- Alert display appears if inner tube bubbles are detected; automatic new sample re-injection

INNOVATIVE AND ROBUST MEASURING CELL

VIDA™ combines an oscillating U-tube sensor – made of metal - with integrated Pt-100 sensors and Peltier elements.

- Fast and reliable response to temperature variations.
- Accurate temperature control across a wide range - 0°C to +100°C.
- No more trade-off between system stabilization and measurement precision



Built-in, automatic bubble detection

INTEGRATED ULTRASONIC CLEANING DEVICE

A patented ultrasonic device enhances solvent performance by cavitation.

- Fast and efficient cleaning and drying
- Reduction of solvents consumption by 40% or more
- Easy removal of solute deposits
- Automatic cell cleanliness check

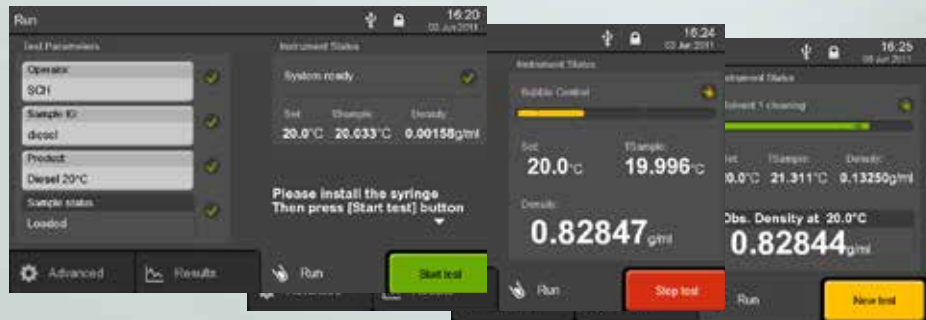
INTUITIVE AND USER-FRIENDLY SOFTWARE

The VIDA™ color touchscreen interface allows very intuitive menu navigation, easy test progress follow-up and straightforward test configuration.

REAL TIME TEST MONITORING

With the progress bar, follow up every sequence step of the ongoing analysis

- Test sequencing into 3 main steps: sample loading; measurement and cleaning steps
- Continuous and real-time display of cell temperature and density values

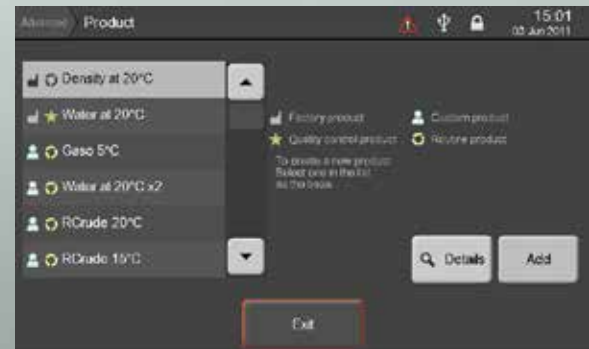


Test progress continuous display

STRAIGHTFORWARD TEST CONFIGURATION

Run your samples according to your specific test conditions

- Factory preset or customized test methods
- Specification limits capability for QC products
- Cleaning and drying cycle under automatic or manual mode
- Multi-Temp™ smart calibration over range of 0°C up to 100°C



Up to 40 Customizable Products

EASY DATA MANAGEMENT

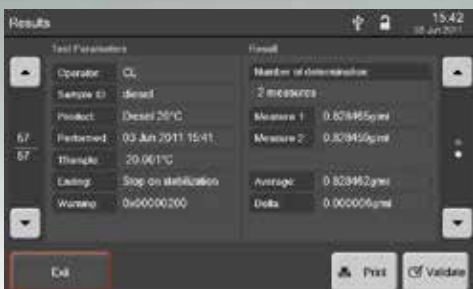
Get actionable information and communicate it automatically

- Integrated API tables for automatic conversion of the density output
- Easy data export to external printer or PC/LIMs via USB and RS232 ports



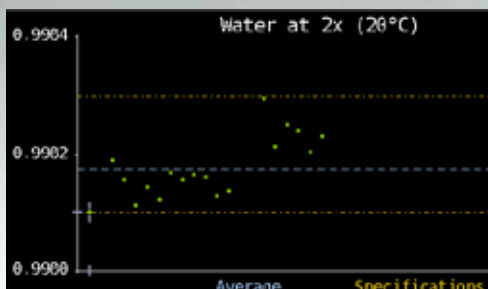
Data Management function

FULL QUALITY ASSURANCE, TOTAL COMPLIANCE



2X MEASUREMENT

Programmable duplicate measurement in one test run for more accurate analysis.



CONTROL CHART

Analyzer performance monitoring chart indicates when calibration adjustment is required.



PASS/FAIL INDICATOR

Fast validation of QC samples in the specification limits or target values requirements



U.S.A.

PAC, LP | 8824 Fallbrook Drive | Houston, Texas 77064
T: +1 800.444.TEST | O: +1 281.940.1803 | F: +1 281.580.0719
sales.usa@pacpl.com | service.usa@pacpl.com

FRANCE

BP 70285 | Verson | 14653 CARPIQUET Cedex
T: +33 (0) 231 264 300 | F: +33 (0) 321 266 293
sales.france@pacpl.com | service.france@pacpl.com

GERMANY

Badstrasse 3-5 | P.O.Box 1241 | D-97912 Lauda-Königshofen,
T: +49 9343 6400 | F: +49 9343 640 101
sales.germany@pacpl.com | service.germany@pacpl.com

SINGAPORE

61 Science Park Road | #03-09/10 The Galen
Singapore Science Park III | Singapore 117525
T: +65 6412 0890 | F: +65 6412 0899
sales.singapore@pacpl.com | service.singapore@pacpl.com

The NETHERLANDS

P.O.Box 10.054 | 3004 AB Rotterdam
Innsbruckweg 35 | 3047 AG Rotterdam
T: +31 10 462 4811 | F: +31 10 462 6330
sales.netherlands@pacpl.com | service.netherlands@pacpl.com

RUSSIA

Shabolovka Street | 34, Bldg. 2 | 115419 Moscow
T: +7 495 617 10 86 | F: +7 495 913 97 65
sales.russia@pacpl.com | service.russia@pacpl.com

CHINA

Room 1003, Sunjoy Mansion | No. 6 RiTan Rd.
Chao Yang District | Beijing 100020
T: +86 10 650 72236 | F: +86 10 650 72454
sales.china@pacpl.com | service.china@pacpl.com

INDIA

1508 | Dev Corpora | Pokhran Road No.1
Eastern Express Highway | Thane (W) - 400 601
T: +91-22-6700 4848 | F: +91-22-4228 4950
sales.india@pacpl.com | service.india@pacpl.com

MIDDLE EAST

A1 Quds Street, A1 Tawar road | LIU#H13 Dubai Airport Freezone
Near Dubai Airport (terminal 2) | P.O.Box #54781 | Dubai, UAE
T: +971 04 2947 995 | F: +971 04 2395 465
sales.middleeast@pacpl.com | service.middleeast@pacpl.com

SOUTH KOREA

#621 World Vision Building | 24-2, Youido-dong
Seoul 150-010
T: +82 2785 3900 | F: +82 2785 3977
sales.southkorea@pacpl.com | service.southkorea@pacpl.com

THAILAND

26th Floor, M. Thai Tower | All Seasons Place
87 Wireless Road | Lumpini, Phatumwan | Bangkok 10330
T: +66 2627 9410 | F: +662627 9401
sales.thailand@pacpl.com | service.thailand@pacpl.com

PAC Authorized Representatives are also located in most countries worldwide. For more information visit www.pacpl.com

ISL

ISL is a global, leading provider of scientific apparatus and instruments for testing petroleum and petrochemical products in the lab and online. More than 20 automatic analyzers bearing the ISL brand are recognized for increasing test precision, boosting laboratory efficiency and reducing costs.

VIDA™ DENSITY METER - MODEL OVERVIEW

KEEP IT SIMPLE WITHOUT TRADING OFF RELIABILITY

Model VIDA 40H – Designed for density measurement within viscosity range up to 15,000 cSt (at test temperature). Features automatic sample injection & cleaning procedures, integrated keep-warm devices (up to 70°C) together with viscosity correction, multi-temp, 2x-measurement and API functions.

Model VIDA™ 40 – Designed for density measurement within viscosity range up to 15,000 cSt (at ambient temperature). Features automatic sample injection & cleaning procedure, API functions.

TAKE THE AUTOMATION TO THE NEXT LEVEL

Model VIDA™ 40 SCH – VIDA 40 H configuration with built-in auto-sampler of 40 positions

Model VIDA™ 40 SC – VIDA 40 configuration with built-in auto-sampler of 40 positions.

SPECIFICATIONS

VIDA™ Density Meters	VIDA 40	VIDA 40H	VIDA 40 SC	VIDA 40 SCH
Analytical principle	Oscillating U-Tube			
Measurement Range	0 to 3 g/cm3			
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	0.01°C
Density Accuracy	0.0001 g/cm3	0.00005 g/cm3	0.0001 g/cm3	0.00005 g/cm3
Density Repeatability	0.00005 g/cm3	0.00001 g/cm3	0.00005 g/cm3	0.00001 g/cm3
Operation				
User Interface	7-inch Color TFT Touch Screen			
Sample loading (sample changer)	Automatic by push piston (No)		Automatic by push piston (Yes)	
Sample keep warm	No	Yes	No	Yes
Bubbles Detection	Automatic (by pressure)			
Cleaning and drying	Automatic (by two solvents)			
Ultrasonic Cleaning	No	Yes	No	Yes
Viscosity Correction	No	Yes	Yes	Yes
Temperature compensation	Yes (API conversion acc. to ASTM-D1250)			
Calibration	By Air / Water		Multi-Temperature	
Results Management				
Documentation	Results instant report in g/ml ; kg/m3; Rel. Density; °API Detailed report on local screen; Print-out reports on printer			
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 Indicator; QC chart; Event Log	Pass/Fail Indicator; QC chart; Event Log; 2x Measurement		
PAC IRIS Software features	• Run Control • Results • Reporting • QC •			
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)	331 x 540 x 375mm (13 x 21 x 15 inch)		251 x 405 x 375 mm (9.9 x 15.9 x 14.7 inches)	
Weight	20kg (44 lbs)		16,8 kg (37.3 pounds)	
Patents and Certifications	Fr. Patents #1055362, #1055357, #1055354 - CE Certification			