

RVP Pro



Vapor Pressure Analysis of Petroleum Products

PSSC introduces the RVP Pro™, a vapor pressure analyzer designed to meet the rigorous demands of high-volume laboratories and field operations. RVP Pro offers professional accuracy and precision, simplicity, durability – while offering the most user-friendly experience and comfort. With a pressure range of 0-1000 kPa, industrial grade hardware and electronics, and unmatched portability, RVP Pro has applications covered from oil field to fuel pump.

Designed by Vapor Pressure Pros for Maximum Performance

RVP Pro performs vapor pressure analysis of crude oil, gasoline, jet fuel and solvents. Its industry proven measuring cell employs sample valving that offers unmatched rinsing of the entire sample circuit, nearly eliminating sample carryover. RVP Pro significantly outperforms the published precision of all available standard test methods.

Maximum User Comfort

An intuitive menu structure displayed on an 8.6" color touch screen, along with a bright, easy to read layout, ensures the most comfortable user experience possible. The industrial-grade, capacitive touchscreen guarantees the best response to user input, even when operating with heavy PPE gloves.

Maximum Portability

RVP Pro is delivered with a custom-designed Pelican case that offers maximum protection when transporting to the testing site or shipping the analyzer for service and calibration. The RVP PRO transport lock (RPTL) centers and secures the shaker system during transport. A highly ergonomic and robust carrying handle, coupled with vibration dampening high grip mounting pads, makes RVP Pro the ideal vapor pressure analyzer for field applications such as tank farms, truck & rail loading racks, pipelines & terminals, and mobile laboratories.

Maximum Reliability

Industrial-grade components, solid framing, and a robust enclosure equip RVP Pro for years of severe duty use, in high-throughput operations and harsh environments.

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Standard Test Methods

- ASTM D5188, ASTM D5191, ASTM D6377, ASTM D6378, CARB 13CCR 2297, EN 13016-1, EN 13016-2, GB/T 8017, IP 394, IP 409, IP 481, JIS K2258-2, SH/T 0769, SH/T 0794, SH/T 2932
- Excellent correlation to ASTM D323 (wet Reid) and ASTM D4953 (dry Reid) and ASTM D5482
- 4x user-programmable methods; fully configurable measurement parameters and correlations

Key Features and Benefits

- Engineered for years of reliable vapor pressure measurements, featuring highly robust components. An automatic oiling system continuously keeps the piston lubricated with fresh oil. The highly chemical-resistant finish protects the enclosure from aggressive samples.
- Most comfortable and user-friendly vapor pressure analysis. Simple user profile creation allows for non-skilled personnel to perform measurements by pushing a single button on the intuitive, full-color touchscreen.
- Industry proven Nickel-plated measuring cell and stainless-steel valving technology allow RVP Pro to handle aggressive samples in addition to being highly resistant to wax/paraffin fouling.
- Advanced thermal management technology isolates the heat sink and measuring cell from mounting plate, preventing heat soaking of the internals during heavy use which impacts precision.

Fuel Specifications

- ASTM D910, ASTM1655, ASTM D4814, ASTM D6227, EN 228, CARB 13CCR 2297
- Ideal for all international fuel specifications according to selected method



- System on Module (SoM) PCB design consumes low power, eliminating the need for bulky/heavy heat sinks. These weight savings allow for more durable construction while maintaining portability and small footprint.
- Linux OS for fast, easy software upgrades and high cybersecurity. - No external PC required, ever.
- Self-diagnostics with error and data logging
- Optional Pipeline Pro package available for pressurized sample collection and injection.
- Transportation lock for securing measuring cell shaking system during shipping and field transport ensure damage-free logistics.
- Pelican™ shipping case with custom jet cut, high-density foam included with standard delivery for the best protection of your precious investment.
- ISO 17025 accredited calibration with standard delivery
- Designed, built, and serviced in the USA

Technical Specifications

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|-----------------------|--|------------------|---|
| Temperature Range | 0 to 100 °C (32 to 212 °F) | Operating System | Linux |
| Temperature Stability | +/- 0.01 °C (0.02 °F) | Display | Industrial grade, 8.6" color touchscreen |
| Temperature Profiles | Celsius, Fahrenheit | Languages | English, Spanish, German, French |
| Pressure Range | 0 to 1000 kPa (0-145 psi) | Results Database | 50,000+ detailed results |
| Pressure Resolution | 0.01 kPa (0.0014 psi) | Results Format | csv for export/transfer |
| Pressure Scales | kPa, hPa, psi, atm | Dimensions HxWxD | 40 x 30 x 30 cm (15.5 x 11.5 x 11.5 in.) |
| Sample Volume | ≤ 1 mL (1.7 mL per rinse cycle) | Weight | 11.4 Kg (25 lbs.) |
| Measurement Time | 5 minutes for standard methods | Power Supply | Dual, switched-mode power supplies 85 - 264 VAC, 47 - 63 Hz, 130 W |
| Inputs | Touchscreen, USB mouse/keyboard, bar code reader | Outputs | LIMS, Printers, USB drive |
| Vapor/Liquid Ratio | 0.2:1 - 100:1, user-adjustable for crude oil and freely programmable methods | | |
| Sample Introduction | Fully automatic via internal piston and valving; for use with siphon tube, syringe, or pressurized cylinder | | |
| Sample Conditioning | Built-in sample shaker with user-selectable shaking speed (1.0 - 5.0 c/s) for crude oil and vapor lock methods | | |
| Precision | Significantly outperforms published precision of all offered standard test methods | | |
| Comm. Interfaces | 3x USB type A, 1x USB type B, RS232, Ethernet 10/100 Mbit/s compliant with IEEE802.3-2002 standard | | |