

Portable Prover Computer

Full API Chapter 12 proving

Full range of API MPMS standards for temperature and pressure compensation

US or Metric engineering units

Pulse interpolation / double-chronometry for compact and reduced volume provers

Volume proving of turbine and positive displacement meters

Mass or volume proving of coriolis mass meters

Trial or full-run sequencing

Four-way valve and Brooks™ SVP control

Illuminated switches for control and display

Two dedicated serial ports for printer and PC laptop

Full data display and retrieval using OmniCom® or OmniView®

Year 2000 Compliant



The Omni 3000 Portable Prover Computer (PPC) is a light-weight, suitcase-mounted proving computer. It has the ability to control the entire prove sequence, including control of four-way valves of a bi-directional prover. Illuminated LED switches give a clear indication of prove sequence status. All process and control signals are distributed amongst flow connectors (see technical specifications).

This computer can also be used with any type of pipe, reduced volume or compact prover, including the Brooks™ Small Volume Prover, as well as Master Meter Proving and mass or volume proving of Coriolis mass flow meter. When using the Brooks Small Volume Prover, the PPC controls the automatic plenum pressure adjustment and the launch of the piston. Specifications are based on an Omni 3000 flow computer resiliently mounted in a Gemini™ heavy duty case with valance seal for dust and moisture protection.

Portable Prover Computer Technical Specifications

Physical Dimensions

12 in x 21 in x 8 in
(305 mm x 533mm x 203 mm)

Weight 30 lbs
(14 kg)

Display

4 line x 20 character alpha-numeric

Volume & Mass Proving Methods for Uni- or Bi-directional Provers

Small or Reduced Volume Provers
Pipe Provers
Master Meters

Temperature Compensation - Keypad Selectable API MPMS Chapter 11.1 for crudes, refined products and LPGs:

TBLs 24 A/B/C, 54 A/B/C
API 2540 TBL 24/54 (1952)
GPA RR133 (0.35 to 0.70 S.G.)
Base Temperature - Keypad selectable on metric revision.

Pressure Compensation

API Chapter 11.2.1 (0° to 90° API) or
API Chapter 11.2.2
(0.350 to 0.637 S.G.)
GPA TP 16 (0.5 to 0.637)

Battery Back-up

Data is retained for a minimum of 30 days in a controlled temperature environment.

Power In

110VAC, 60HZ / 220VAC, 50HZ

Auxiliary Power Out

110VAC, 60HZ / 220VAC, 50HZ

Prover

Prover Temperature	4-20mA
Prover Pressure	4-20mA
Prover Density	Freq./4-20mA

Discrete Inputs

Prover Detector Switches and
'Piston upstream' signal*
Initiate Prove Signal (Run)
Launch Forward & Launch Reverse
Hydraulic On*
Valid Seal

Pulse Inputs

Two Meter Inputs
(Test 1 & Test 2/Master Meter)

Outputs

RS-232-C to PC (OmniCom® or
OmniView®)
RS-232-C out to external printer

Connectors

Four (4) Amp #MS3102A24 Shell
Receptacles for:
Prover Temperature**
Prover Pressure**
Test Meter Temperature
Test Meter Pressure
Master Meter Temperature
Master Meter Pressure
Plenum Pressure*

* Brooks SVP only

**Available on Two Receptacles

OmniCom, OmniView and "Measure the Difference" are registered trademarks of Omni Flow Computers, Inc. Specifications are subject to change by manufacturer without notice due to modifications or improvements.