

Model 745 High Accuracy Pressure Standard



Paroscientific, Inc.
Digiquartz® Pressure Instrumentation

The Model 745 Portable Transfer Standards provide the highest accuracy pressure measurements for laboratory and metrological applications. Digiquartz® Transducers cover 25 absolute and gauge pressure ranges up to 40,000 psi (276 MPa) with unsurpassed **accuracy, reliability and stability**. The **new, simple, intuitive front-panel user interface and versatile functionality** with the rear-panel RS-232 **computer interface** make the Model 745 the best choice for high performance pressure calibrations.



General :

The Model 745 is **portable, easy to use, and fully self-contained** in a **CE marked compact case**. Turn it on and immediately read the pressure values in any of nine different user-selectable engineering units. All pressure readings are fully temperature compensated and linearized. Tare functions, pressure units, temperature units, resolution, sampling time, number of display digits, communication settings, baud rates, sensor address, and password can be selected via the front panel menu system. The choices for second line display include an analog pressure bar graph, sensor temperature, rate of

pressure change, stored text or external text. The unit can also be controlled via the bi-directional RS-232 interface with a new, improved command set. Free software is included to read and log data via the RS-232 port.

The unit is either continuously powered from its AC adapter or for up to 20 hours from four AA cells. Pressure readings and an overpressure signal can be displayed remotely with the optionally available Model 715 display.

Paroscientific is certified to the **ISO**



9001:2000 International Quality Standard. Our quality system and commitment to excellence ensure customers of outstanding products and services. We offer a **market-leading five year limited warranty** on all DigiQuartz[®] Transducers with the first two years covered at 100%.

Technical Data:

Resolution: 0.0001 % FS

Accuracy ⁽¹⁾: Better than 0.008 % FS⁽²⁾

Overpressure: 1.2 times FS ⁽³⁾

Operating temperature range: 0...40 °C

Power Requirement: ... +6 to +25 VDC

Adapter: 110 V or 220 V AC

Typical Current Consumption: ... 72 mA

⁽¹⁾ Accuracy relative to the primary standard includes resolution, hysteresis, non-repeatability, and non-conformance.

⁽²⁾ Accuracy of Model 745-16B is ±0.08 hPa. Model 745-30K and 745-40K accuracies are better than 0.02% F.S.

⁽³⁾ Except Model 745-500A, Model 745-20K and Model 745-40K

Dimensions:

156 x 98 x 207 mm

Weight:

1.8 kg

Optional Accessories:

- Model 715 Display.
- High Performance Pressure Port (DigiPort) - Model 745-16B Only
- Rack Mount Panel

- Accredited Calibration Certificate (depending on measuring range)

Absolute Pressure Ranges:

psia	MPa	Model
0-15	0-0.1	745-15A
7.2-16	0.05-0.11	745-16B
0-23	0-0.16	745-23A
0-30	0-0.21	745-30A
0-45	0-0.31	745-45A
0-100	0-0.69	745-100A
0-200	0-1.38	745-200A
0-300	0-2.07	745-300A
0-400	0-2.76	745-400A
0-500	0-3.45	745-500A
0-1000	0-6.89	745-1K
0-2000	0-13.8	745-2K
0-3000	0-20.7	745-3K
0-6000	0-41.4	745-6K
0-10000	0-68.9	745-10K
0-15000	0-103	745-15K
0-20000	0-138	745-20K
0-30000	0-207	745-30K
0-40000	0-276	745-40K

Gauge Pressure Ranges:

psig	MPa	Model
0-15	0-0.1	745-15G
0-22	0-0.15	745-22G
0-30	0-0.21	745-30G
0-100	0-0.69	745-100G
0-150	0-1.03	745-150G
0-200	0-1.38	745-200G

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