



PORTACOUNT™ Respirator Fit Tester

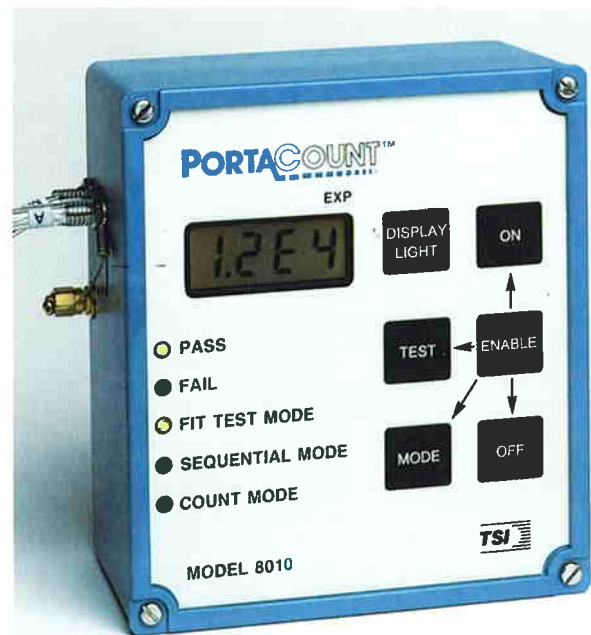
Features and Specifications

An Innovative Approach to Quantitative Respirator Fit Testing

The TSI PORTACOUNT is a portable instrument designed for respirator fit testing. The PORTACOUNT utilizes particles in ambient air as the challenge aerosol, making operation possible in nearly any location. The battery-powered PORTACOUNT, part of TSI's family of RESPOTRAC™ Respirator Testing Systems, measures fit factors accurately to 10,000 and greater.

PORTACOUNT Features

- Portable, compact unit operates without chambers, tents or generators
 - Computes respirator fit factor using ambient air or generated aerosols
 - Measures fit factors to 100,000
 - Displays measured fit factor and provides Pass/Fail indication based on easily adjustable preset criterion
 - Unique condensation nucleus counting (CNC) technology detects particles as small as $0.02 \mu\text{m}$ over a concentration range of less than $0.1 \text{ particles/cm}^3$ to $5 \times 10^5 \text{ particles/cm}^3$
 - Microprocessor-controlled unit uses a stable laser diode and solid state photodetector
 - Lighted display provides fit factor directly with no conversion or interpretation required
 - Rugged enclosure resists harsh environmental conditions
 - Lightweight unit includes belt clip for transporting convenience
 - Additional operating modes include a Sequential Mode for measuring upstream and downstream concentrations at different times; and Count Mode for continuous display of aerosol concentrations
- Low battery warning
 - Low particle concentration warning
 - RS-232 output
 - Automatic shut-off to conserve battery life
 - Carrying case with space for optional accessories (printer and AC adapter)
 - Internally-selectable pass/fail set points



Specifications

| | |
|---------------------------|---|
| Size | 6 in x 5 ³ / ₈ in x 3 in (15 cm x 14 cm x 8 cm) |
| Weight | 3 lb (1.4 kg) |
| Fit Factor Range | 1 to greater than 10,000 |
| Concentration Range | 0.06 to 5 x 10 ⁵ particles/cm ³ |
| Particle Size Range | 0.02 to greater than 1 micrometer |
| Typical Accuracy | ±10% of reading |

Temperature Range

| | |
|-----------------|------------------------------|
| Operation | 32 to 100 °F (0 to 38 °C) |
| Storage | -40 to 160 °F (-40 to 70 °C) |

Flow Rate

| | |
|--------------|------------------------------------|
| Sample | 100 cm ³ /min |
| Total | 700 cm ³ /min (nominal) |

Battery

| | |
|-------------------------------------|---------------------------|
| Hours of operation per charge | 4 hours at 70 °F (21 °C) |
| Charge cycles | 500 |
| Rating | 4 volts, 2.5 amp-hour |
| Type | Lead-acid |
| Shelf life | 1% loss of charge per day |

Alcohol

| | |
|-------------------------|--------------------------|
| Hours per charge | 6 hours at 70 °F (21 °C) |
| Alcohol type | Reagent grade isopropyl |
| Volume per charge | 6 cm ³ |

RS232 Output

| | |
|-----------------------|------|
| Data Bits | 8 |
| Start/Stop Bits | 1 |
| Baud Rate | 1200 |
| Handshaking | None |
| Parity | None |

Carrying Case

| | |
|---------------------|---|
| Size | 20 in. x 13 in. x 6 in. (51 cm x 33 cm x 15 cm) |
| Weight (full) | 8 lb (3.6 kg) |

Pass/Fail settings

(fit test mode)..... 5, 10, 20, 50, 100, 200, 500, 1000, 1667, 2000, 4000, 6667, and 10000

Warranty..... One year parts & labor, 90 days on battery

Accessories included with the instrument:

- | | |
|---|---|
| <input type="checkbox"/> Carrying case | <input type="checkbox"/> Stand |
| <input type="checkbox"/> Two battery packs | <input type="checkbox"/> Operator guide |
| <input type="checkbox"/> Battery charger (specify 115 VAC or 230 VAC) | <input type="checkbox"/> Operation and maintenance manual |
| <input type="checkbox"/> Sampling tube (1/8 in. (3 mm) ID) | <input type="checkbox"/> Tube adaptors for 3/16 in. and 1/4 in. (5 mm and 6 mm) tubing |
| <input type="checkbox"/> Alcohol supply (48 bottles) | |
| <input type="checkbox"/> HEPA filter for leak checking | |

Optional accessories:

- Model 8902 Portable Printer (fits in carrying case)
- Model 8015 Fit Test Software (IBM PC® compatible)
- Model 8018 AC Adapter

IBM PC is a registered trademark of International Business Machines Corporation

Specifications are subject to change without notice.

TSI

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