

Certifier® FA Test System for Gas Flow Analysis

TSI, a worldwide leader in air and gas flow measurement technology, introduces the first truly portable device for measuring flow, pressure, oxygen concentration and multiple breathing parameters needed for testing medical devices in institutional, home care, field service and laboratory applications.

The Certifier® FA Test System is:

- Affordable**—1/3 cost of competitive instruments
- Lightweight**—but rugged
- Portable**—powered by 4 AA batteries
- Easy to use**—keypad menus and large display screen

The following capabilities make Certifier FA Test Systems ideal for biomedical testing applications, including ventilators (hospitals and home care), oxygen concentrators and anesthesia delivery systems.

- Flow
- Peak Flow
- Volume
- Stacked Volume
- Minute Volume
- Inspiratory Time
- I:E Ratio
- Respiratory Rate
- Pressure
- Peak & PEEP Pressure
- Barometric Pressure
- Oxygen Concentration (with optional Model 4073 Oxygen Kit)



Actual size: 5.2 inches × 2.8 inches × 1.3 inches
132 mm × 71 mm × 33 mm



Controller with high and low flow

Specifications

Certifier FA Test Systems

Flow and Peak Flow

High Flow Air or O ₂	0 to 300 standard L/min; accuracy ±2% of reading or ±0.075 standard L/min, whichever is greater
High Flow Air/O ₂ Mix	0 to 300 standard L/min; accuracy ±4% of reading or ±0.100 standard L/min, whichever is greater
Low Flow Air or O ₂	0.01 to 15 standard L/min; accuracy ±2% of reading or ±0.010 standard L/min, whichever is greater
Low Flow N ₂ O	0.01 to 15 standard L/min; accuracy ±4% of reading or ±0.025 standard L/min, whichever is greater

Volume Plus Stacked Volume

High Flow Air or O ₂	0 to 10 L STP; ±2% of reading plus 0.020 L STP
High Flow Air/O ₂ Mix	0 to 10 L STP; ±4% of reading plus 0.020 L STP
Low Flow Air or O ₂	0 to 9.999 L STP; ±2% of reading or ±0.010 L STP, whichever is greater
Low Flow N ₂ O	0 to 9.999 L STP; ±4% of reading or ±0.010 L STP, whichever is greater
Minute Volume	0 to 99 L STP; ±7% of reading

Low Pressure

High Flow Module	-25 to 150 cm H ₂ O (-18.4 to 110 mmHg); ±0.75% of reading or ±0.20 cm H ₂ O (0.15 mm Hg)
Low Flow Module	Not applicable.

Breath Rate

Respiratory Rate	0.5 to 120 BPM; ±5% of reading
I:Time	0.25 to 60 seconds; ±0.01 seconds
I:E Ratio	
High Flow	1:100.0 to 100.0:1; ±5% of reading
Low Flow	1:15.0 to 15.0:1; ±5% of reading

Other Measurements

Barometric Pressure	375 to 1500 mm Hg; ±8 mm Hg
Oxygen	0 to 100% O ₂ ; ±2% O ₂ at calibration conditions

Specifications are subject to change without notice.



Model 4070 High Flow Standard Kit

Ordering Information

Model	Description
4070	High Flow Standard Kit; Controller Module (Model 4078) and High Flow Module (Model 4071).
4075	Low Flow Standard Kit; Controller Module (Model 4078) and Low Flow Module (Model 4074).

(Models 4070/4075 include bacteria filter, pressure tubing and adapters, flow module mounting bracket, screwdriver, 4 AA batteries, Operator's Manual, NIST-traceable Certificate of Calibration and soft-sided carrying case.)

The Certifier FA is not a medical device under FDA 510(K) and should not be used for human measurements nor be used while the equipment under test is being used on a patient.

Modules, Accessories and Replacement Parts

Model	Description
4073	Oxygen Sensor Kit; oxygen sensor, threaded tee, 8-inch cable; use with High Flow Module to measure oxygen concentration and other measurements for any mixture of air and O ₂ .
4076	High Flow Module; air or 100% oxygen; flow range 0 to 300 standard L/min
4072	Low Flow Module; air, 100% oxygen or 100% nitrous oxide; flow range 0.01 to 15 standard L/min
4078	Controller Module; keypad and display allow user to select test measurements and units for display. Connects to High and Low Flow Modules.
Part Number	Description
2917019	Replacement oxygen sensor.
1319288	Hard shell carrying case for Certifier FA Test System and accessories

Additional information is available in Operator's Manual, on the internet at <http://flowmeters.tsi.com>, or contact TSI directly.



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