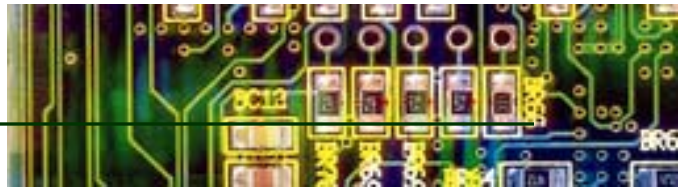


TSI Certifier FA

Respiratory Ventilator Test System



Highlights

- ***Simply the best way to test ventilators, oxygen concentrators, and other respiratory & flow devices! A complete measurement solution for air, oxygen, and nitrous oxide!***
- ***1/3 the size & 1/3 the cost of competitive products!***
- ***Flow Rate***
- ***Volume***
- ***Pressure***
- ***Minute Volume***
- ***Inspiratory Time & I:E Ratio***
- ***Breath Rate***



Certifier FA Controller Module shown approximately actual size

BC Group International, Inc.
9415 Gentry Avenue
St. Louis, MO 63125 USA
314-638-3800
314-638-3200 Fax
1-888-223-6763



www.bcgrouppintl.com

Specifications

<u>Parameter</u>	<u>Specification</u>
High Flow Air or O2	0-300 slpm; +/- 2% of reading or +/-0.075 slpm
High Flow Air/O2 Mix	0-300 slpm; +/-4% of reading or +/-0.100slpm
Low Flow Air or O2	0.01-15.00 slpm; +/-2% of reading or +/-0.010 slpm
Low Flow N2O	0.01-15.00 slpm; +/-4% of reading or +/-0.025 slpm
High Flow Mod. Vol. Air or O2	0-10 liters; +/-2% of reading or +/-0.020 l stp
High Flow Mod. Vol. Air/O2 Mix	0-10 liters; +/-4% of reading or +/-0.020 l stp
Low Flow Mod. Vol. Air or O2	0-9.999 l stp; +/-2% of reading or +/-0.010 l stp whichever is greater
Low Flow Mod. Vol. N2O	0-9.999 l stp; +/-4% of reading or +/-0.010 l stp whichever is greater
High Pressure	N/A (Recommend Meriam Smart Manometer from BC Group:0-72 psig @ +/-0.025% F/S)
Low Pressure	-25 to 150 cmH2O; +/-0.75% of reading or +/-0.20 cmH2O
Breath Rate	(0.5 to 120 BPM) +/-5%
I:Time	(0.25 to 60 seconds) +/-0.01 sec.
E:Time	Not Displayed
I:E Ratio	1:100.0 to 100.0:1 +/-5%
Minute Volume	0-99.00 stp liters +/-7%
Gas Temperature	Temperature is measured; flow and volume calculations are automatically adjusted.
Barometric Pressure	375 to 1,500 mmHga; +/-8mmHga
Oxygen	0-100%; +/-2% at Calibration Conditions
Portability	Case For Complete Kit - 11"x8"x4" - 3 Lbs.
Warm-Up Time	1 minute
Calibration Interval	1 Year
Power	(4) AA - Battery Life 15 to 20 Hours
Warranty	1 year from date of purchase

**Specifications & capabilities
dependent upon module,
option, and accessory
configuration.
See Ordering Information below.**

Ordering Information

4070 High Flow Test System: Includes controller module, high flow module, 4 AA batteries, filter, pressure tubing and adapters, flow module mounting bracket, screwdriver, manual, NIST-traceable Certificate of Calibration, and soft-sided carrying case.

4075 Low-Flow Test System: Same as above except substitute low-flow for high-flow module.

4071 High-Flow Module only

4072 Low-Flow Module only

4073 Oxygen Kit: Adds O2 measurement capability to Certifier FA Test System.

1319288 Hard Carrying Case

BC20-40700 Protective Boot & Stand

350-DN2000 Smart Manometer

Digital Pressure Meter: Allows higher pressure measuring capabilities to Certifier system.

Specifications subject to change without notice.

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BC Group
Integrity is Our Competitive Advantage
www.bcgrouptl.com



Prepared by your source for
the new TSI Certifier Ventilator Test System:

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314-638-3800
314-638-3200 Fax
1-888-223-6763
www.OneStopBiomedShop.com

Ventilator Tester Comparison Chart

Parameter	TSI Certifier	Mallinckrodt PTS 2000	Bio-Tek VT-Plus	RT200
High Flow Air or O2 Accuracy	0-300 SLPM +/- 2% of reading or +/-0.075 SLPM, whichever is greater	0-300 SLPM +/- 1.75% of reading +0.10 SLPM	300 SLPM +/-2% of reading or +/-0.5 SLPM	5-180 SLPM +/-2% of reading
High Flow Air/O2 Mix Accuracy	0-300 SLPM +/- 4% of reading or +/-0.100SLPM, whichever is greater	0-300 SLPM +/- 4% of reading + 0.10 SLPM	Does Not Specify Gases Not Specified	N/A
Low Flow Air or O2 Accuracy	0.01-15.00 SLPM +/- 2% of reading or +/-0.010 SLPM, whichever is greater	0-15 SLPM +/- 1.75% of reading + 0.025 SLPM	25 SLPM +/-2% of reading or +/-0.1 SLPM	0-5 SLPM +/-4% of reading
Low Flow N2O Accuracy	0.01-15.00 SLPM +/-4% of reading or +/-0.025 SLPM, whichever is greater	0-15 SLPM +/-3% of reading +0.025 SLPM	Does Not Specify Gases Not Specified	0-5 SLPM +/-3% of reading or +/-2 digits
Volume Air or O2 Accuracy	0-10 L STP +/-2% of reading or +/-0.020 L STP, whichever is greater +/-2% of reading or +/-0.010 L STP, whichever is greater (Low Flow Module)	0-10 L STP +/-2% or 0.02 L STP	7 L STP +/-3% of reading or +/-10ml	0-3 L STP
Volume Air/O2 Mix Accuracy	0-10 L STP +/-4% of reading or +/-0.020 L STP, whichever is greater	0-10 L STP +/- 4.5% of reading +0.02 L STP	Does Not Specify Gases Not Specified	N/A
Volume N2O Accuracy	0-9.999 L STP +/-4% of reading or +/-0.010 L STP, whichever is greater	Does Not Specify N2O Not Specified	Does Not Specify Gases Not Specified	N/A
High Pressure Accuracy	N/A - Recommend Meriam Smart Manometer 0-72 psig +/- .025% F/S - List Price \$662	0-100 psig +/- 1% of reading +0.1 psig	100 psig +/- 1% of reading or +/-0.1 psig	0-100 psig +/-1.5% of reading
Low Pressure Accuracy	-25 to 150 cmH2O (-18.4 to 110 mmHg) +/-0.75% of reading or +/-0.20 cmH2O, whichever is greater	-150 to 150 cmH2O +/- 0.75% of reading +0.04 cmH2O	+/- 120 cmH2O +/-0.75% of reading or +/-0.5 cmH2O	-120 to 250 cmH2O +/-1.6% of reading
Breath Parameters				
Breath Rate	(0.5 to 120 BPM) +/-5%	(.5 to 120 BPM) +/-5%	(2-150 BPM) +/-1%	+/-5% of reading or +/-1 digit
I:Time	(0.25 to 60 seconds) +/-0.01 sec.	(0.25 to 60 seconds) +/-0.01 sec.	(0.2 - 30) +/-1% or 0.1sec	0.1 to 5 sec +/-5% of reading
E:Time	Not Displayed	(0.25 to 60 seconds) +/-0.01 sec.	(0.2 - 30) +/-1% or 0.1sec	0.1 to 99 sec +/-5% of reading
I:E Ratio	HF(1:100.0 to 100.0:1) +/-5%, LF 1:15.0 to 15:0:1; +/-5% of reading	(1.999 to 999:1) +/-5%	(0.25 - 9.99) +/-2% or 0.1 Sec.	1:10 to 1:9.9 +/- 5% of reading
Minute Volume	(0-99.00 stp liters) +/-7%	(0-99 L STP) +/-7% Air or O2 (0-99 L STP) +/-9% Air/O2 Mix	(0-60 L STP) +/-3% or 250ml	no stated accuracy range for parameter
Barometric Pressure Accuracy	375 to 1,500 mmHga +/-8mmHga	10-16 psia (500 - 800 mmHg) +/-0.1 psia (5mmHg)	Not Specified	N/A
Oxygen Accuracy	0-100% +/-2% at Calibration Conditions	0-100% +/-2%	0-100% Not Specified	N/A
Portability	Case For Complete Kit - 11"x8"x4" - 3 Lbs.	8"x4.1"x11.5" - 7 Lbs.	10"x10"x5" - 10 Lbs.	12"x10.5"x11.5" 20 Lbs.
Warm-Up Time	1 minute	10 Minutes		5 Minutes
Calibration Interval	1 Year	1 Year	1 Year	1 Year
Calibration Cost	\$185 For Each Flow Module	\$550	\$500	\$455
Power	(4) AA - Battery Life 15 to 20 Hours	110V / No Battery	110V / No Battery	110V / No Battery
Case	Softcase - N/C Included With High Flow Package	Hard-case Available For \$457.29	Softcase Avail for \$119, Hard-case \$253	Optional
List Price	Inc. High Flow Kit, Low Flow Module & O2 Kit - \$3,465	Base Unit - \$7,500	Base Unit - \$8,315	N/A Obsolete

All specifications are subject to change without notice and are believed to be accurate per each manufacturer's published information as of the time of printing.
No warranty is offered on this information and the reader is encouraged to verify specifications. Please Note: Pricing is current as of November, 2005.