QUAD

Features:

Reliable Oxygen Production

Rugged, Environmentally Tolerant Design

Oxygen Monitor Included

Compact & Lightweight for Maximum Design Flexibility

Constant Delivery Pressure

Benefits:

Low Capital and Operating Costs

Eliminates the Need for an External Product Tank

Quiet Operation For Use In Any Location

Minimal Power Required

The Quad Family

Oxygen Concentrator Subsystems

Each member of the Quad Family utilizes patented Advanced Technology Fractionator (ATF®) modules connected together in a subsystem. When used with oil-less compressed air, Quads deliver high oxygen flows and purities without high cost. Quads can be matched with SeQual® brand oil-less compressors for complete systems or with other appropriate compressed air sources.

The Quad Advantage

Quad oxygen concentrators offer the same design simplicity and elegance as the Advanced Technology Fractionator (ATF®), and build upon it by connecting four modules together to produce four times as much oxygen product. As with the ATF, the Quad is easy to install in any system, and requires virtually no maintenance. Simply plug it in, connect the compressed air source, and begin making high purity oxygen.

All Quad units feature fully integrated controls to ensure reliability. There is no need for a surge tank for the compressed air, a product tank for the oxygen, or electronic control circuits. Just turn the flow meter to the appropriate oxygen level and receive a smooth, steady supply of oxygen.

Quad units are very economical when considering both capital and operating costs. As a matter of fact, a Quad uses less than 50 watts of power. Each Quad includes pressure gauges, a flow meter and an oxygen monitor as standard items.

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The ATF Advantage

ATF® oxygen modules incorporate proven pressure swing adsorption (PSA) principles into a unique patented design, which is far more compact, efficient, rugged and lower in cost than conventional PSA systems. The ATF® module offers unparalleled design flexibility and enables applications where on-site/on-board oxygen generation was previously impractical.

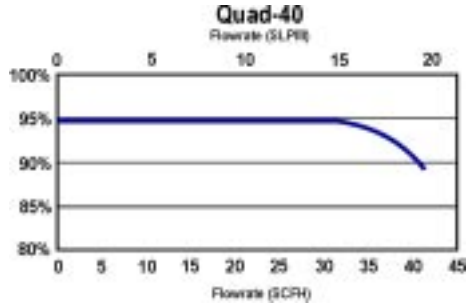
ATF® vs. Conventional PSA Systems

	Conventional	ATF
Inlet Air Pressure (PSIG)	90	20-35
Pressure Reducing Regulator	Required	None
Maintenance	Substantial	Minimal
External Product Tank	Required	None

The Quad Family

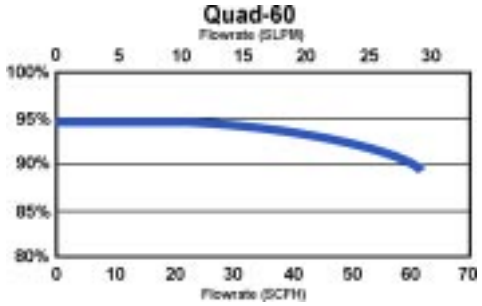
Quad-40

The Quad-40 provides oxygen from 0-40 standard cubic feet per hour (SCFH)/ 0-19 standard liters per minute (SLPM) at 90-95% purity.



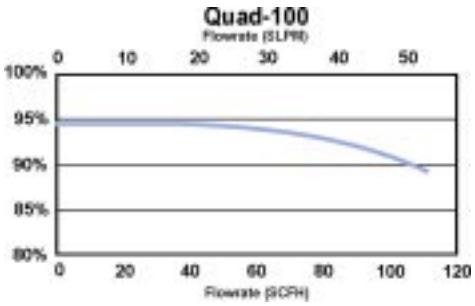
Quad-60

The Quad-60 provides oxygen from 0-60 standard cubic feet per hour (SCFH)/ 0-28 standard liters per minute (SLPM) at 90-95% purity.

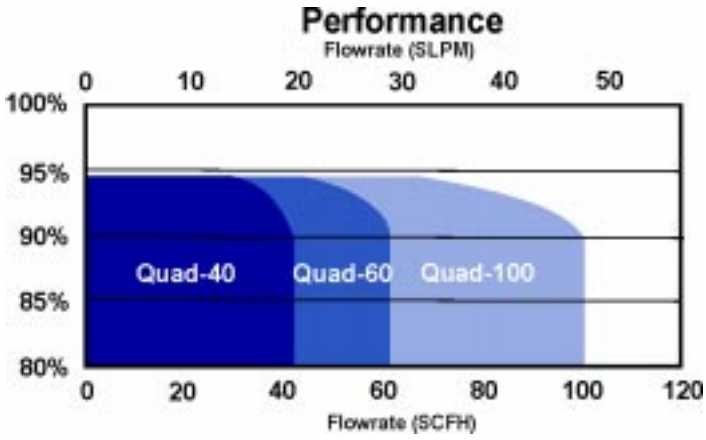


Quad-100

The Quad-100 provides oxygen from 0-100 standard cubic feet per hour (SCFH)/ 0-47 standard liters per minute (SLPM) at 90-95% purity.



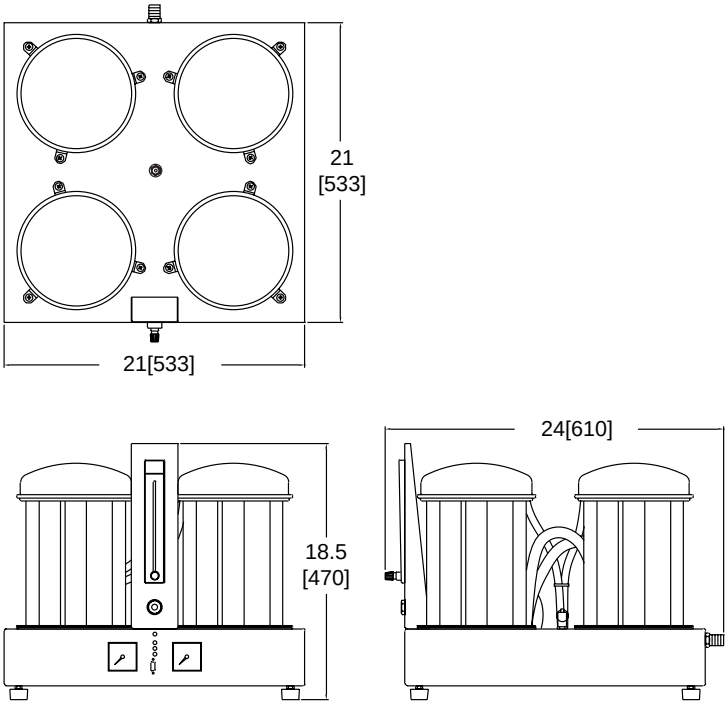
Quad Performance Data



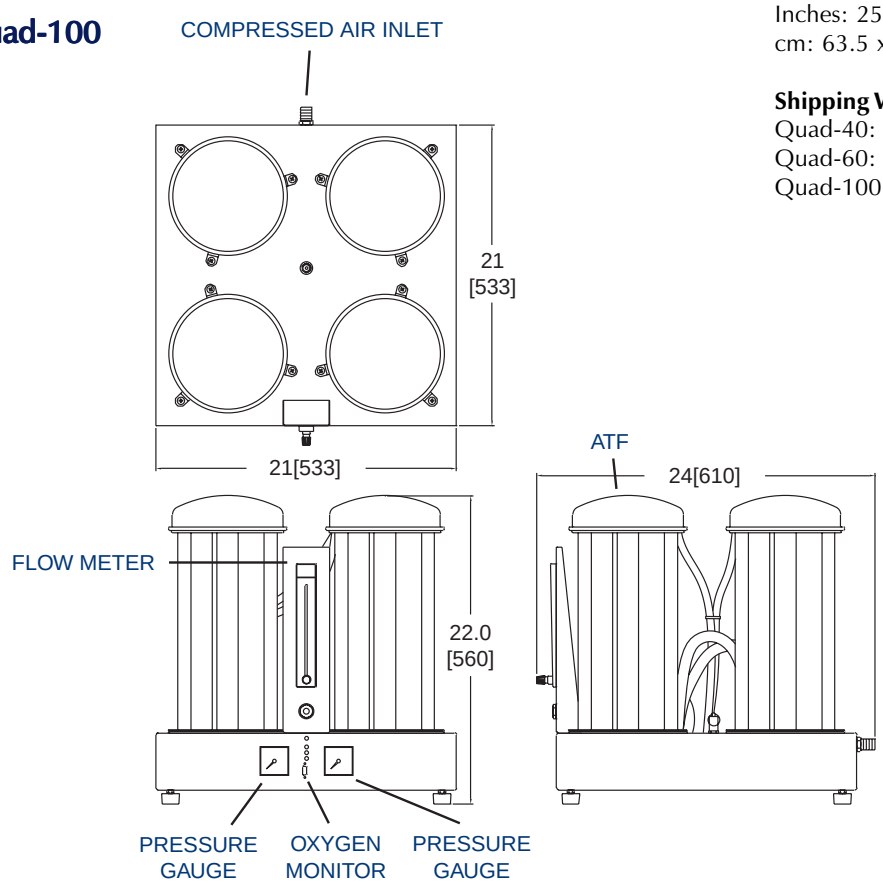
This data is presented as a basis for Quad selection only. Performance is based upon nominal units tested under lab conditions. Please call for additional information.

Envelope Dimensions
inches (mm)

Quad-40



Quad-60 & Quad-100



Quad Characteristics:

Ambient Temperature Parameters:
40°F - 130°F (4°C - 54°C) inside operating enclosure
0°F - 140°F (-18°C - 60°C) storage

Compressed Air Input Requirements:
Clean Air (oil-less)
Maximum temperature of 170°F (77°C)
(Performance rated at 120°F (49°C))

Oxygen Delivery Dewpoint:
-100°F (-74°C)

Physical:
Air inlet: Barb for 3/4" ID hose
O_2 outlet: 1/8" NPT Female pipe connection

Electrical:
Power consumption is 48 watts.

Oxygen monitor output for oxygen concentration and alarms is nine pin D-sub connector.

Shipping:
Packing Dimensions:
Inches: 25 x 25 x 24
cm: 63.5 x 63.5 x 61

Shipping Weight:
Quad-40: 95 lbs. (43.0 kg)
Quad-60: 105 lbs. (47.6 kg)
Quad-100: 105 lbs. (47.6 kg)

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Quad Specifications and Performance

Name	Model #	Power Supply	Input Air Requirements		Performance Data		
			Flow	Pressure	Flow 90%(+3%/-5%)O_2 at:	Oxygen Delivery Pressure	Weight (Mass)
Quad-40	5040	120 V, 60 Hz	12 CFM 340 LPM	22 PSIG 1.5 bar	40 SCFH 19 SLPM 1.1 m^3/hr 80 lb/day	8.0 psig 0.6 Bar 410 mm Hg 220 in H_20	85 lbs (39 kg)
	5042	208-240 V, 60 Hz					
	5044	220-240 V, 50 Hz					
Quad-60	5060	120 V, 60 Hz	13 CFM 370 LPM	18 PSIG 1.2 bar	60 SCFH 28 SLPM 1.7 m^3/hr 120 lb/day	7.0 psig 0.5 Bar 360 mm Hg 190 in H_20	95 lbs (43 kg)
	5062	208-240 V, 60 Hz					
	5064	220-240 V, 50 Hz					
Quad-100	5100	120 V, 60 Hz	25 CFM 710 LPM	35 PSIG 2.4 bar	100 SCFH 47 SLPM 2.83 m^3/hr 200 lb/day	15.0 psig 1.0 Bar 780 mm Hg 420 in H_20	95 lbs (43 kg)
	5102	208-240 V, 60 Hz 220-240 V, 50 Hz					

Quad Accessories

9157 Compressed Air Hose 3/4″ x 10′L
9160 Oxygen Product Hose 1/4″ x 10′L

Please contact SeQual for compressed air system information.

Patented Simplicity for Reliable Long Life

The unique design of the Advanced Technology Fractionator (ATF) oxygen module eliminates dozens of components and interconnections found in conventional PSA systems. A patented single rotary distribution valve built into the ATF® module is continuously rotated at low speed by a small motor. The valve is maintenance free, self-cleaning, insensitive to contamination, and invulnerable to wear. It sequentially directs the flow of compressed air to a group of four sieve beds (adsorption), while at the same time another four beds are purged into the atmosphere though the valve (desorption). The remaining four of the twelve beds are interconnected through the valve to equalize pressure as the sieve beds sequentially transition between adsorption and desorption. In contrast to a conventional PSA system, the small amplitude pressure swings generated by the ATF's twelve sieve beds eliminate loud noise pulses, eliminate the need for a pressure regulator, and reduce compressor wear.

SeQual Technologies, Inc.

11436 Sorrento Valley Road
San Diego, CA 92121, USA
Tel: (858) 558-0202
(800) 826-4610
Fax: (858) 558-1915
Web Site: www.sequal.com
Email: industrialsales@sequal.com

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