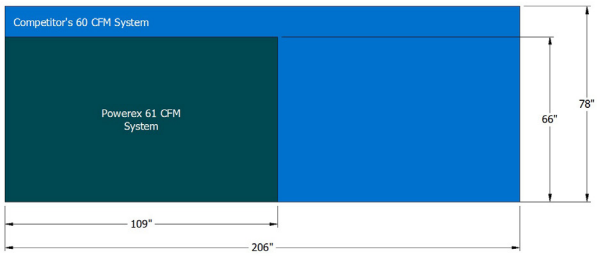
POWEREX®
MEDICAL

Oil-less Instrument Air Systems

Designed & Manufactured in the USA
with U.S. and Imported Components

The Powerex Advantage



Reduced Total System Footprint

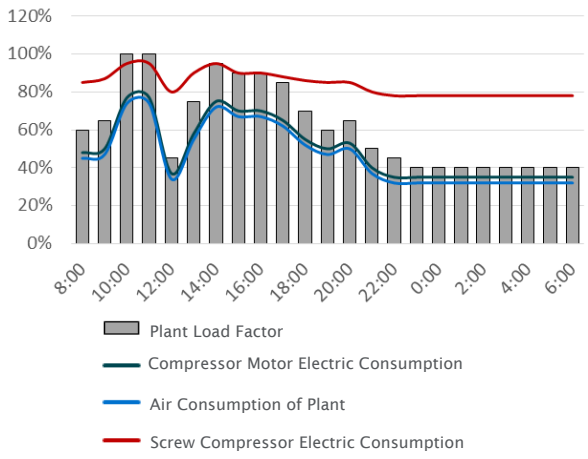
Our newly redesigned and upgraded instrument air systems reduce overall system footprint, allowing for flexibility of hospital design and ease of installation.

- Up to 63% overall system footprint reduction when compared to leading competitor
- Skids designed to fit through 36" door

Easily Serviceable

Our systems are energy efficient and easily serviceable.

- Motor slide for easy belt tensioning
- Common service items easily accesible



Energy Efficient

With the Powerex Variable Pump Drive system, each compressor pump is automatically staged on/off individually based on actual system demand, maximizing energy efficiency at all usage levels. Lead compressor status will alternate every time a pump is called for – or every 60 minutes, whichever comes first – which maintains equal run hours and extends maintenance intervals.

Redundancy is built into our system with our multiple pump design.

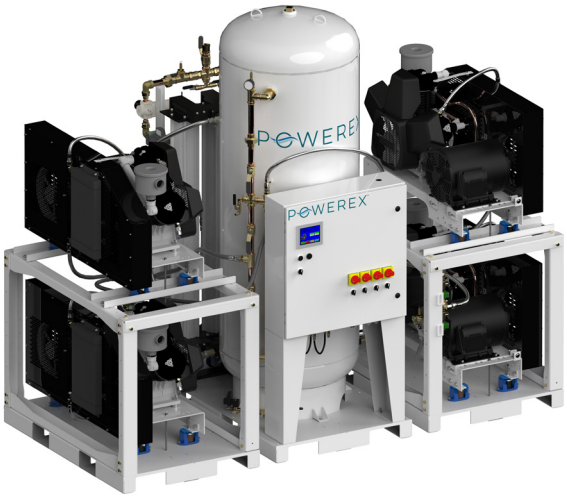
NFPA 99 Instrument Air Systems

All systems are fully compliant with the latest edition of NFPA 99 and are manufactured in ISO 9001:2015 certified facilities. Powerex has become a leader in vacuum and air systems through our foundation built on engineering, innovation, quality, and service. We are a highly integrated operation, not only assembling systems, but also designing and manufacturing many of the major components. We are proud to say our systems are made in the U.S.A.!

Design Features

Each instrument air system includes:

- Multiple compressors
- ASME receiver
- UL508A control panel
- Air purification system
- Dew point monitor
- All interconnecting piping and wiring
- Vibration isolation pads and flex connectors
- Certified for use in seismic areas



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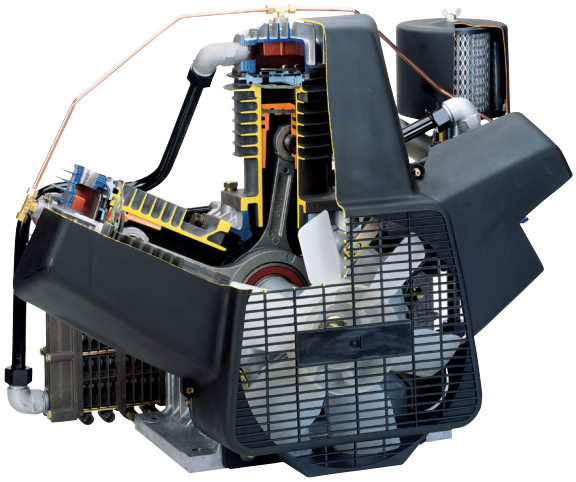
Oil-less Reciprocating Piston Technology



Our oil-less reciprocating piston systems feature self-lubricating composite piston technology which increases ring life and reduces temperature, providing reliability for years to come. The dual cooling pistons reduce operating temperatures, while the corrosion-resistant components and coatings extend ring and valve life.

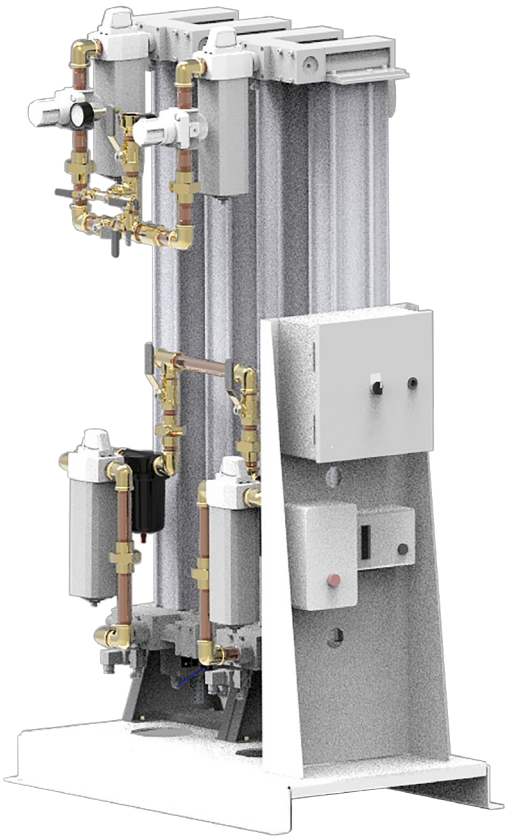
- No oil anywhere
- Composite piston reduces bearing heat
- Dual cooling flywheel and fan
- Corrosion resistant coating extends valve and ring life

Oil-less Instrument Air Systems*

Model (1)	HP	Phase	Voltage	SCFM @ 185 PSIG(2)	Tank Size (gal)	Dimensions (L x W x H) (in)	Shipping Weight (lbs)
Duplex - Model IOPD							
IOPD0754XP5	7.5	3	208/230/460	19.1	120	70x55x82	2210
IOPD1004XP5	10	3	208/230/460	26	120	70x55x82	2316
IOPD1504XP5	15	3	208/230/460	34.3	120	70x55x82	2407
Triplex - Model IOPT							
IOPT0754XP5	7.5	3	208/230/460	38.2	120	105x65x82	2978
IOPT1005XP5	10	3	208/230/460	52	200	105x65x82	3073
IOPT1506XP5	15	3	208/230/460	68.6	240	109x65x93	3590
Quadplex - Model IOPQ							
IOPQ0755XP5	7.5	3	208/230/460	57.3	200	109x65x82	3728
IOPQ1006XP5	10	3	208/230/460	78	240	109x65x93	4081
IOPQ1506XP5	15	3	208/230/460	102.9	240	109x65x93	4263

Notes:
* Table specifications are defined at sea level conditions with reserve pump(s) on standby per NFPA 99. Consult factory for installations above 3,000 ft. elevation.
1 - "X" in model number defines system voltage. "2", "3", & "4", signify 208, 230, & 460 volt systems, respectively.
2 - Powerex recommends using performance ratings in SCFM (Standard Cubic Feet per Minute) when sizing medical air sys¬tems. The final line pressure will be 160 psi with a system capacity of up to 185 psi.

Instrument Air Package Accessories



Our NFPA 99 compliant instrument air systems are packaged with desiccant air dryers and a dew point monitor.

Desiccant Air Dryers

- Pressure swing adsorption technology with a repressurization cycle
- In fixed-cycle mode, total cycle time is four minutes, or two minutes per tower
- In variable-cycle mode, the total cycle time can be increased up to 120 minutes
- Dryer includes:
  - Automatic purge saver – dew point dependent
  - Differential pressure indicators for both inlet and outlet filters
  - Purge muffler
  - Tower pressure gauges
  - Regulators with gauges
  - Isolation ball valves

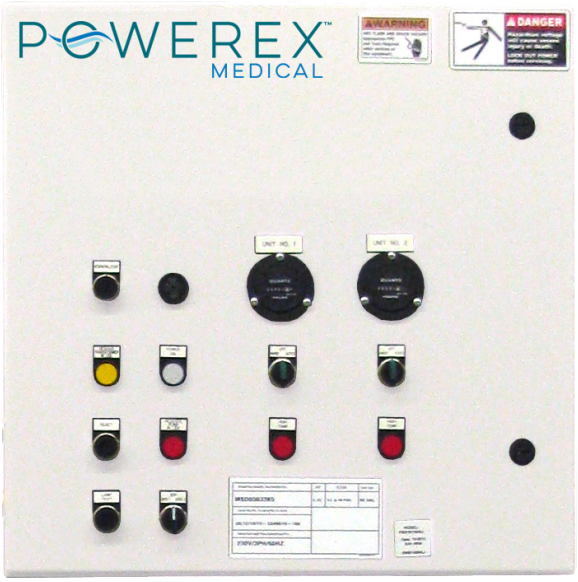
Dew Point Monitor

- Auto calibration
- Polymer sensor technology
- Visual and audible alarms
- Dew point purge control

Control Panel Options

Standard Premium Control Panel

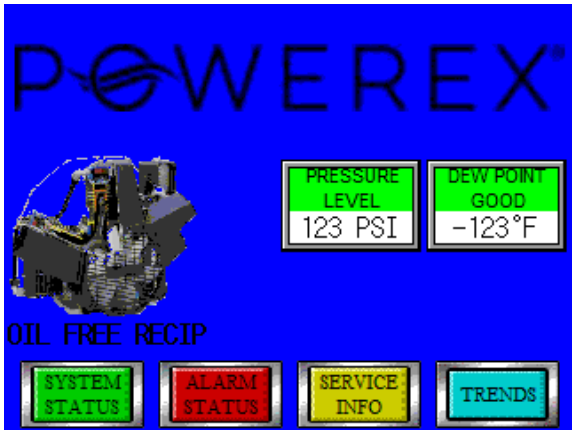
- PLC controller and 6" color HMI touch screen displays the operating status of the unit
- Building automation gateway with BACnet over IP protocol
- UL508A listed and labeled, NEMA 4/12 enclosure
- Visual and audible alarms for:
  - System overload trip
  - High temperature conditions
  - Service intervals
  - High dew point level
- Panel door includes:
  - Visual and audible alarms
  - HOA switch for each pump
  - 3-position dryer switch
- Integrated dew point monitor



Optional Non-HMI Control Panel

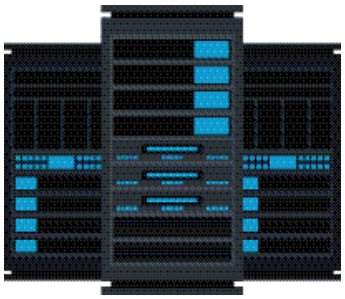
- UL508A listed and labeled, NEMA 4/12 enclosure
- Timed lead/lag compressor alternation
- Visual and audible reserve compressor in use alarm
- Redundant control circuit transformers
- Dry contacts for remote alarm monitoring
- Each compressor provided with:
  - Hand/Off/Auto selector switch
  - Magnetic starter with 3 leg overload protection
  - Visual and audible high temperature shut down
  - Hour meter
  - Compressor run light
- Dew point monitor with LCD dew point display

BACnet



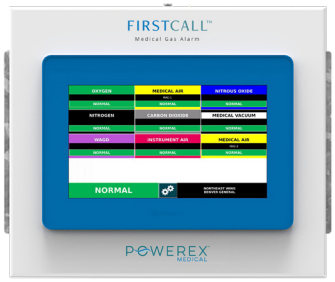
Standard in Powerex's premium control panel.

- Seamlessly connect to your building management system via Ethernet using BACnet over IP protocol
- Centrally monitor medical gas equipment along with all other facility equipment



Building Automation System

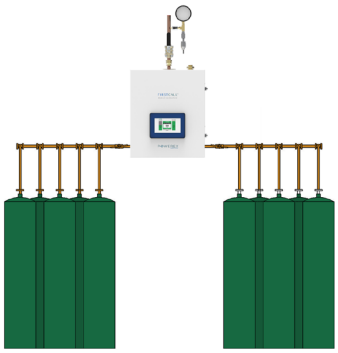
BACnet over IP



Medical Gas Alarm

Medical Air Compressor System

Medical Vacuum System



Medical Gas Manifold

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April 2025

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