



**AUTOMATION & MOTION CONTROL SPECIALISTS**

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## Waveguide Dehydrator

TSI Solutions' waveguide dehydrator system is powered by an oil-less compressor and includes a pressure regulator, air filter, and membrane dryer capable of achieving atmospheric dew points of -40° F. Virtually maintenance free, this unit is entirely self-sufficient and produces clean, dry air. Sturdy, compact frame is wall- or rack-mountable.

### DESCRIPTION OF CONTROLS:

- Pressure control: 0.5 – 5.0 psi; adjustable to within 0.2 psi
- Excess run time alarm (*optional*)
- Low pressure alarm (*optional*)
- Humidity indicator (*standard*)

Any or all of the sensors and alarms can be wired into the control system for remote monitoring and/or adjustment.

All sensors are UL, CE, and ROHS compliant.

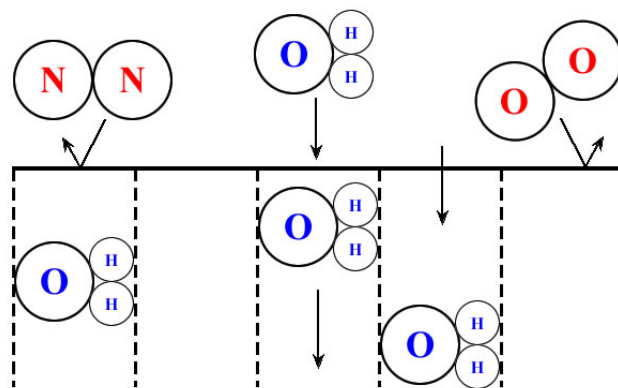
### SYSTEM COMPONENTS:

1. Compressor – oil-less, low pressure diaphragm unit
2. 5-micron pre-filter
3. Membrane dryer for -40°F dewpoint
4. Pressure regulator
5. Modular, T-slotted aluminum frame for rack or wall mounting

### SYSTEM FACTS:

- Unit is entirely self-sufficient
- Membrane dryer lowers dewpoint to -40°F
- Pre-filter protects membrane dryer from contamination
- System utilizes an oil-less compressor
- Resulting air is uncontaminated by oil
- Resulting air is clean *and* dry
- Unit-mounted air reservoir stores compressed air which reduces duty cycle of compressor, extending life of compressor indefinitely
- Water vented out of dryer in vapor form: no condensation
- No manual drain or valves to operate or clog
- No changing of elements or other maintenance required
- Labor costs associated with maintenance are virtually eliminated
- 3-year warranty

### BASIC MEMBRANE DRYER OPERATION



N2 and O2 molecules are too large to fit through the pores in the membrane. H2O, however, slips through and is evacuated out of the dryer.