



Air-Compressor Specs / Guidelines for AirWash™



A unique automatic cleaning system for Und-Aware™ camera lens and LEDs

The AirWash™ function requires an air-compressor, and a special compressor is supplied for all CONUS (110v) deliveries. The compressor we supply is not available in a 220v version. Therefore, it is not included in overseas shipments. A usable compressor should be readily available anywhere in the world. Further, it is good to have applicable warranties with local resellers/distributors, for readily available replacement/repairs if the compressor fails to operate within the specified warranty period.

The recommended specification and requirements for the air-compressor are as follows:

1. If possible, the compressor should be rated as commercial duty, which indicates a 50% duty cycle. This is to ensure the longest life and best operation.
2. The compressor must have a sufficiently low inrush current to not overload the power circuit where it is used. Note: This is more often an issue with inexpensive compressors that have a very large inrush current and will often overload a guardhouse electrical circuit; especially if there are heaters/air-conditioners and other electrical items in use. The issue with duty cycle relates to hot-weather operation and long-term reliability. A non-commercial rated compressor will operate at a higher temperature and may "thermal OFF" which is to say, it may stop working if it is used too much. It will return to normal operation once it cools.
3. Pressure should be between 100 and 140 PSI (0.7 - 0.9 MPa). The larger the storage tank, the less frequently the compressor will cycle on, but otherwise the tank size is irrelevant. Typically, a 8 to 15 gallon compressor is sufficient for normal operations.
4. The hose should be 3/8 in diameter (10mm), or may be larger. Length of the hose is irrelevant as the hose acts as an additional storage reservoir and adds to the volume in the compressor storage tank. The Und-Aware™ system is supplied with a fitting kit that adapts to a standard 3/8 NPT thread, either male or female.
5. We recommend a 1/2-inch hose and screw the fitting into the compressor. If a quick disconnect is needed, use a 1/2 inch quick-disconnect fitting on the compressor end only. Insert the other end of the hose into the AirWash™ sleeve. **Do not** use one or more 3/8 inch quick-disconnect fittings (for instance, one on each end of the hose) as these will severely limit the air flow and will compromise your AirWash™ effectiveness. All needed fittings are available from VIT, or your local plumbing supplier.
6. You may want to locate the compressor outside the monitoring facility, as most units are rather noisy. Remotely locating the air compressor and running a long hose will not reduce the effectiveness of the AirWash function.

It is interesting to note that the compressor does not have to run continuously to keep the AirWash™ system operational. The air in the line and the tank is sufficient to operate the AirWash™ system.

Such a compressor should be available from any building contractor supply center.

This picture on the right is a sample compressor used with our 400 series Und-Aware™ system. A large variety of commercially off-the-shelf compressors will work perfectly well with our AirWash™ system.

