

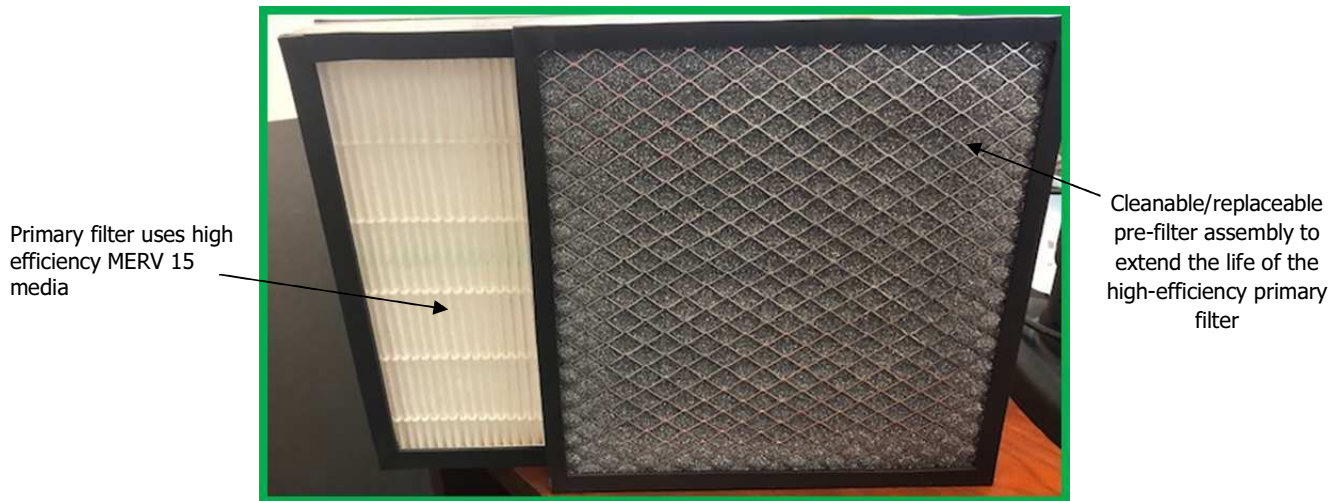
WR (Weather Resistant) AIR FILTERS

Limit dust, water, wind driven rain and salt fog ingress

Custom UAF WR (Weather Resistant) Filter solutions limit ingress of dust, water, and salt fog into electronics enclosures using fresh air intake and direct air-cooling systems instead of costly, inefficient, closed loop heat exchangers. This is an ideal solution for telecommunications, power generation, video or LED displays, kiosks, military/defense, and any other industrial or commercial outdoor enclosures installed in harsh environments.

Model WR Air Filters Feature:

- Exceptional water and airborne dust particle protection
- Allows designers to utilize ambient air to cool outdoor enclosures
- Unique 2-stage filter design reduces water ingress reaching the primary filter keeps resistance low in wet environments
- Lower initial resistance provides significant cost savings through decreased power consumption and longer filter life
- Lower cost alternative to OSP filters employing membrane technologies.
- Increased air flow with up to 25% lower initial resistance than typical OSP air filter solutions
- Compliant with stringent industry standards including NEBS GR-487 (salt fog), NEMA, and IP enclosure ratings
- Cleanable/replaceable pre-filter to extend the life of the high efficiency pleated media
- UL900, RoHS and REACH compliant



Primary and Pre-filter combination limits ingress of dust, water, and salt fog

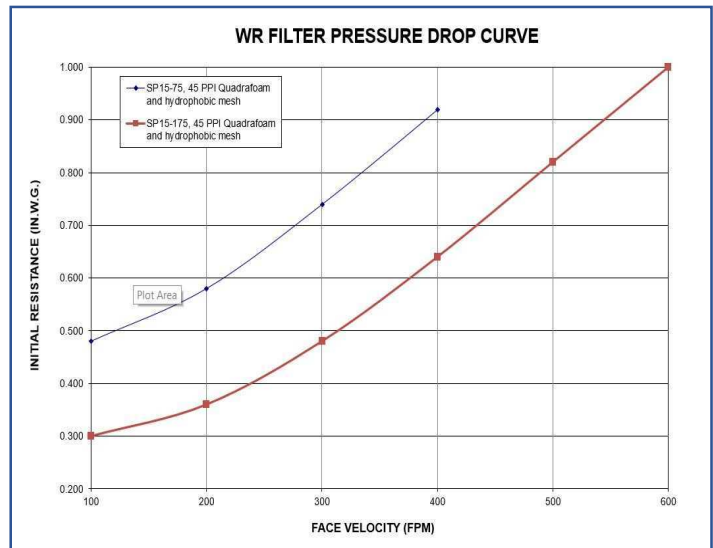
Product Applications:

The UAF WR Air Filter solutions are designed to prevent water, salt fog, and fine dust particulate intrusion for fan-cooled indoor and outdoor industrial / electronics enclosures. This product helps maintain performance of all electronic equipment within outdoor enclosures installed in mild to severe environments.

Industry Applications:

WR Filters are well suited for industry applications including:

- Outdoor video displays and LED signs
- Kiosks and menu boards
- Power generation and charging station enclosures
- Industrial and commercial systems



Specifications

The newly developed UAF WR Air Filter solution utilizes a high efficiency primary filter in combination with a cleanable pre-filter. Each filter uses a urethane gasket to provide a watertight seal. A cleanable/ replaceable open-cell polyurethane foam pre-filter with an engineered polyester (PET) mesh is installed upstream of the primary filter. This 3-stage filtration solution offers a high-level of protection for outdoor enclosures by allowing higher air flow and lower initial resistance compared to other outdoor enclosure filter solutions. The WR Air Filter solution provides protection against dust, water, and salt fog ingress to meet stringent industry standards, IP55 and Telcordia NEBS GR-487 (salt fog). It offers similar water ingress and salt fog protection as other filters employing membrane technology, but at less cost and up to 25% lower initial resistance. Model WR Air Filters are custom engineered filtration solutions designed to fit nearly any outdoor enclosure while meeting industry requirements for RoHS/REACH compliance and UL900.

Media:

The WR pre-filter utilizes a 2-stage approach, consisting of an open-cell polyurethane foam filter media and hydrophobically treated polyester (PET) mesh. The foam media is installed on the upstream side of the pre-filter and provides a low resistance means of capturing coarse dust particles while effectively decreasing the force of strong water jets directed at the filter. The PET mesh is installed on the downstream side of the pre-filter and is PTFE coated for moisture resistance. The WR primary filter provides a third stage of protection using a pleated, synthetic, MERV 15 media sealed in an aluminum frame to provide protection from fine dust particles and airborne water droplets that may pass through the pre-filter. This combination of media solutions provides an exceptional level of equipment protection for direct air cooled or convection vented outdoor enclosures.

Frame:

The WR Air Filter solution uses an aluminum frame for both the primary and pre-filter, and a RoHS compliant chemical conversion coating can be added for corrosion resistance. The WR Air Filter solution is available in nearly any width and length in standard, 2" and 3" nominal thicknesses (1.63" and 2.63" actual). Custom thicknesses are also available. For certain applications, drain holes can be added to the pre-filter frame so water exits quickly.