

REACTIVITY MONITORING SERVICE

CORROSION PROTECTION FOR ELECTRICAL AND ELECTRONIC EQUIPMENT



PROTECTION

Industries spend millions of dollars each year on valuable industrial electronic and process equipment that requires protection from the overall corrosion potential of their environment.

QUATRO's Reactivity Monitoring Service (RMS) diagnoses the corrosion potential of these environments according to the instrument Society of America's (ISA) Standard S71.04 outlining severity of corrosion from G1 (mild) to GX (severe) environments.

FEATURES

- Detailed analysis provided to assist in the following decisions: should supplemental environmental protection be provided, what method of protection is most suitable, how should the equipment be qualified for service in the intended application, and what is the priority of action for multiple locations.
- · Location versatility-optional mounting in control rooms, instrument cabinets, control systems, or outdoor air source.
- $\cdot\,$ Provides a qualitative and quantitative measure of the overall corrosion potential of an environment.
- $\cdot\,$ Test methodology backed by years of site analyses in thousands of equipment applications worldwide.
- $\cdot\,$ Meets field monitoring requirements for extreme sensitivity (<1ppb gaseous, <100 Angstroms film thickness).
- · Fully compatible with ISA design criteria determining equipment reliability.
- · Minimal space requirements.

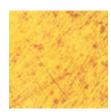
APPLICATIONS

- · Datacenters, telecommunications, central banking data servers.
- · Electronic control rooms (pulp & paper, petrochemical, manufacturing, etc.)
- High technology industry (computer chip manufacturing, process rooms, etching areas).
- Outdoor air analysis (industrial facilities, compressor intake, archive storage facilities, hospitals, museums)

MEASUREMENT PARAMETERS

Each test site is classified according to ISA Standard S71.04. Basic class designations are as follows:

- **G1** An environment sufficiently well-controlled such that corrosion is not a factor in determining equipment reliability.
- G2 An environment where the effects of corrosion are measurable and will have a detrimental effect on equipment reliability over time.
- G3 An environment where a high probability of corrosion attack will occur. This level is not acceptable for modern control equipment.
- **GX** An environment where only specially designed and packaged equipment should be expected to survive.



G3 Environment Pore corrosion and corrosion creep.



GX Environment Severe pore corrosion, corrosion creep and physical degradation.

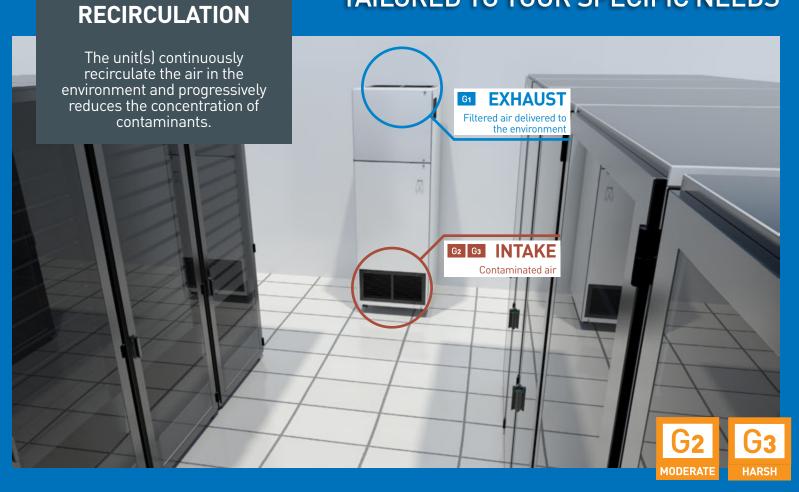


Severe GX Environment Severe pore corrosion, corrosion creep and physical degradation, corrosion migration causing short circuiting.





CUSTOM SOLUTIONS TAILORED TO YOUR SPECIFIC NEEDS





Corrosion of contacts and components on circuit boards accounts for 30 to 40% of all equipment failures. The eCorrosion is caused by an unmanaged environment consisting of combinations of uncontrolled temperature and humidity, along with harmful corrosive gases inside the electronic equipment rooms. Early life failures due to eCorrosion could result in unplanned warranty, and other maintenance and replacement related costs.

Dual high speed turbine for high airflow

- Whisper quiet operation
- · Multi-stage filtration system
- **Custom filter configurations available**
- Front door access to filters for easy service
- Intelligent controls, digital speed control, audible & visual alarms

Air Flow: 0-411 m³/h / 0-242 CFM Max Pressure: 42" W.C. / 10.5 kPa 1.2 kW brushless blower Motor(s):

120V or 230V Voltage:

Dimensions: $13"W \times 21"D \times 45"H / 330mm \times 533mm \times 1143mm$

Filter Sequence: Antimicrobial high capacity bag filter (F128)

23" deep bed custom chemical filter

1.5", 2", 2.5", 3" or 4" discharge collars Discharge:

Sound Level: 52 dBA at full speed

Remote ON/OFF, communication capabilities, Controls:

audible and visual alarms











- · Whisper quiet operation
- · Multi-stage filtration system: pre-filter, HEPA and chemical filter
- · Custom filter configurations available
- · Front door access to filters for easy service
- Intelligent controls, digital speed control, audible & visual alarms

Air Flow: Nominal 1700 m³/h / 1000 CFM

Voltage: 120V or 230V

24"W x 26"D x 71"H / 610mm x 660mm x 1800mm Dimensions:

Filtration: Pre-filters

Chemical filter, up to 100 lbs / 45kg

Medical grade HEPA filter(s) 99.97% (or 2nd stage Chemical filter)

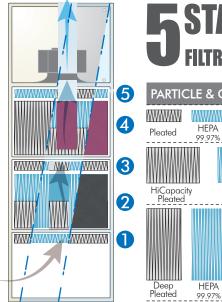
Inlets/Discharge Adjustable grilles Sound Level: Whisper quiet, 54 dBA

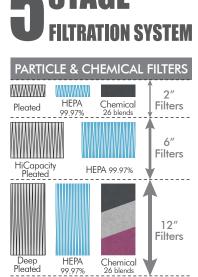
Remote ON/OFF, communication capabilities, Controls: audible and visual alarms











- **High volumetric flow rate**
- · Whisper quiet operation
- · Multi-stage filtration system: pre-filter, HEPA and chemical filter
- · Custom filter configurations available
- · Front door access to filters for easy service
- Intelligent controls, digital speed control, audible & visual alarms

Air Flow: Nominal 1019 m³/h / 600 CFM

Voltage: 120V or 230V

16"W x 22"D x 53"H / 400mm x 560mm x 1320mm Dimensions:

Filtration: Pre-filters

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Medical grade HEPA filter(s) 99.97% (or 2nd stage Chemical filter)

Inlets/Discharge Adjustable grilles Sound Level: Whisper quiet, 54 dBA

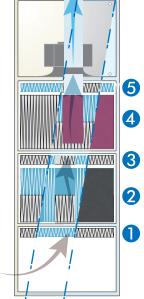
Controls: Remote ON/OFF, communication capabilities,

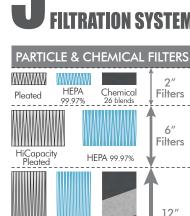
audible and visual alarms











Chemical

Filters



The AF600 features interchangeable HEPA, pleated and chemical filters that allow the unit to be easily reconfigured on-site for particle or chemical filtration, or both.

With a small footprint and negative/positive air ready AF600 offers superior protection for small indoor areas.

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Whisper quiet operation

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