

Product sheet

Munters LDP

Specially developed for low dew point applications



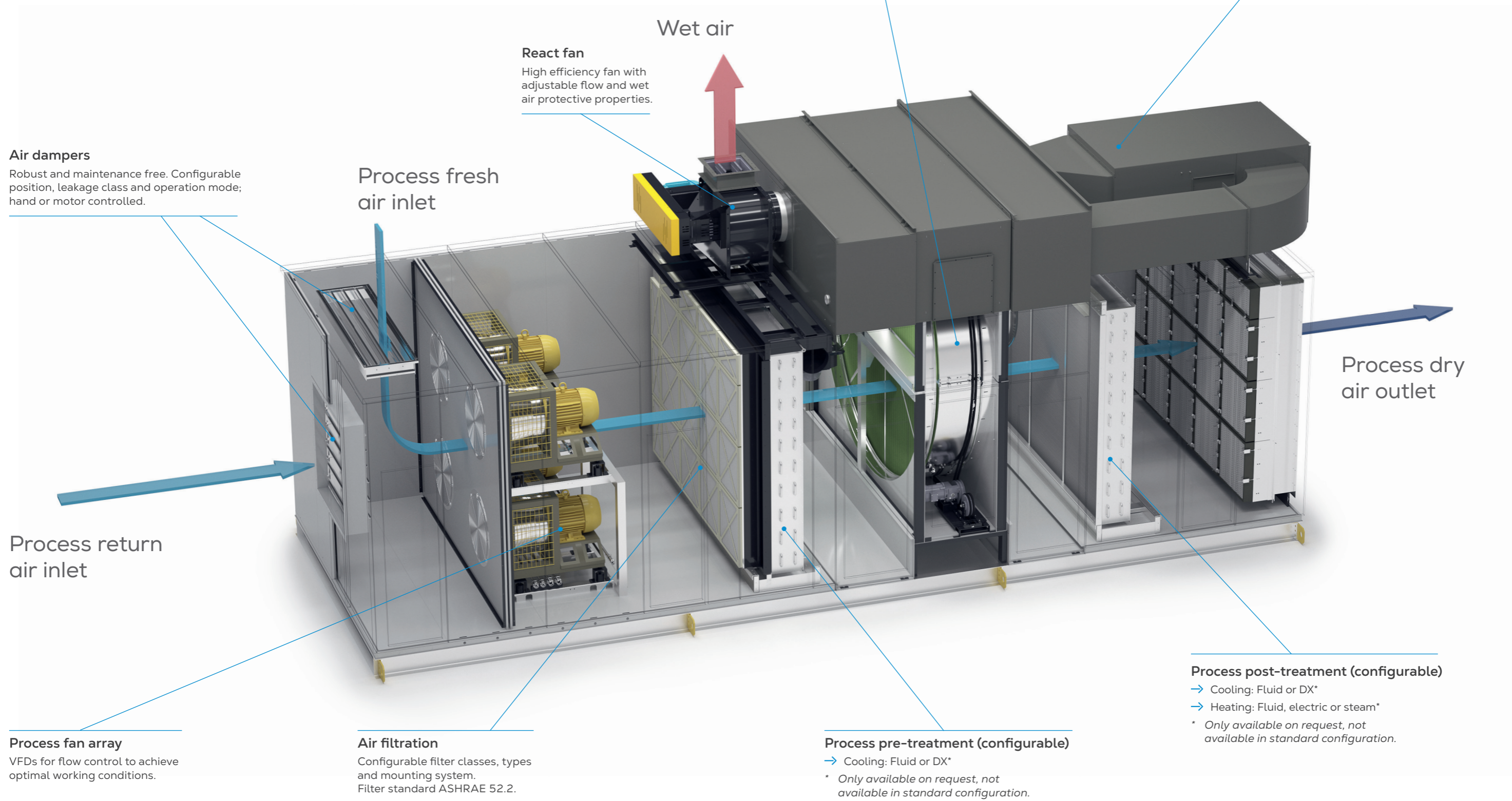
Munters LDP is specially developed for low dew point applications and features the battery-specific HPX rotor with the ability to maintain dry rooms at continuous -40°F to -70°F or even lower dew points, 24/7/365, providing uninterrupted quality production with a 40% smaller footprint vs. industry standard.

It is available for indoor and outdoor installation. The Munters LDP is available in multiple purge configurations designed to optimize performance and energy usage per customer requirements.

Features

- Munters HPX desiccant is specially designed for low dew point applications
- Can handle a variety of air inlet conditions (ranging from 100% return air to 100% outside air)
- Easily achieves extreme low supply dew points
- Gas, steam or electric reactivation as standard
- Combined pre- and post-heating and cooling coils for compact design and minimized footprint
- Standardized design is cost-effective
- Optimized purge cycle provides 30-45% energy savings vs. industry standard purge
- Configurable fans on process circuit
- Flexible communications protocols
- Offered with either 460V or 575V at 60Hz
- Advanced controls and communication
- Standardized components offer simplified maintenance and service
- System maintains a leakage rate of $<1\%$ rated airflow at $\pm 10''$ w.c.
- Manufactured in an ISO 9001:2015 certified facility
- Certified by UL1995 standards

All individual components are fitted inside the modular double wall construction enclosure with at least 2.4" foam insulation thickness, and a no-through-metal design. The casing parts are corrosion resistant by use of Galvalume on the surface. The LDP rotor is located within a welded aluminum housing that ensures minimal leakage and provides robust and durable construction.



Performance
Munters Premium high-performance HPX desiccant wheel. Superior strength and durability – designed to last.

React heater
Steam, electric or gas. Ready for sustainable energy. Configurable size and power.

React fan
High efficiency fan with adjustable flow and wet air protective properties.

Process fresh air inlet

Process dry air outlet

Air dampers
Robust and maintenance free. Configurable position, leakage class and operation mode; hand or motor controlled.

Process return air inlet

Process fan array
VFDs for flow control to achieve optimal working conditions.

Air filtration
Configurable filter classes, types and mounting system. Filter standard ASHRAE 52.2.

Process pre-treatment (configurable)
→ Cooling: Fluid or DX*
* Only available on request, not available in standard configuration.

Process post-treatment (configurable)
→ Cooling: Fluid or DX*
→ Heating: Fluid, electric or steam*
* Only available on request, not available in standard configuration.

Munters LDP

Munters LDP offers a standard fixed design that is cost-effective, operates at a large range of flow rates, and simplifies and standardizes maintenance, service, and spare parts.

With a 40% smaller footprint than the industry standard, Munters LDP saves valuable space for other revenue-generating activities. Munters LDP's optimized purge provides 30-45% energy-savings compared to the industry standard purge. Unlike other systems, the battery industry specific HPX desiccant rotor is specially designed for low dew point applications.

Munters offers more than a bench-mark dehumidification system with the LDP. As a partner with the knowledge and expertise to ensure indoor climate is always exactly as it needs to be, Munters provides support from design and quotation to ongoing service from our offices all over the world.

Technical specifications

Model LDP-3000	
Dimensions L x W x H (in.)	370 x 145 x 157
General weight (lbs.)	22,000
Flow range (SCFM)	10,000 - 32,000
Typical ESP in H ₂ O (process/react)	3.5 / 2

Munters rotor expertise

Based on the desiccant rotor technology, originally patented by Munters, the Munters LDP provides high moisture absorbing capacity year after year, enhanced performance through the energy recovery sector and certified bacteriostatic desiccant rotors.

Proven outstanding quality

Made of non-metallic, ceramic composite, Munters highly hygroscopic rotors are engineered to provide superior strength and durability.

The manufacturing method, developed and patented by Munters, results in a strong and stable structure. Our quality control tolerates no imperfections that can inhibit the performance of the dehumidifier, and the desiccant wheel is characterized by a smooth and regular surface - designed to last.

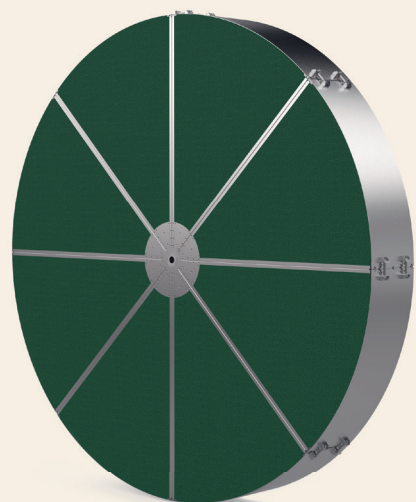
A premium rotor for LDP

Munters HPX

The first choice for when extremely low dew points are required.

HPX rotor is the first choice for low- and ultra-low dew points e.g., Lithium battery industry. The rotor can maintain dry room dew points in the ideal working range of -40°F to -70°F or even lower, due to its special design of the desiccant pore system and material. The HPX rotor uses a proprietary blend of silica gel and molecular sieve that achieves superior performance over an extended period of time.

- Even when exposed to air at 100% relative humidity, the silica gel desiccant is not "washed out"
- Silicone free version available when needed e.g., for automotive and electronics industries



The Munters Advantage

Advanced controls and communication

Munters LDP is equipped with the Munters custom configured control system, which is mounted in a separate control enclosure. Available controls and integrations include:

- HMI systems local or remote
- AB Ethernet, Modbus TCP/IP, Modbus RTU, and BACnet IP
- Control by absolute humidity, relative humidity or dew point
- VFD flow control
- Controlling of all functions and alarms

Everything is wired and factory tested before delivery and implementation.

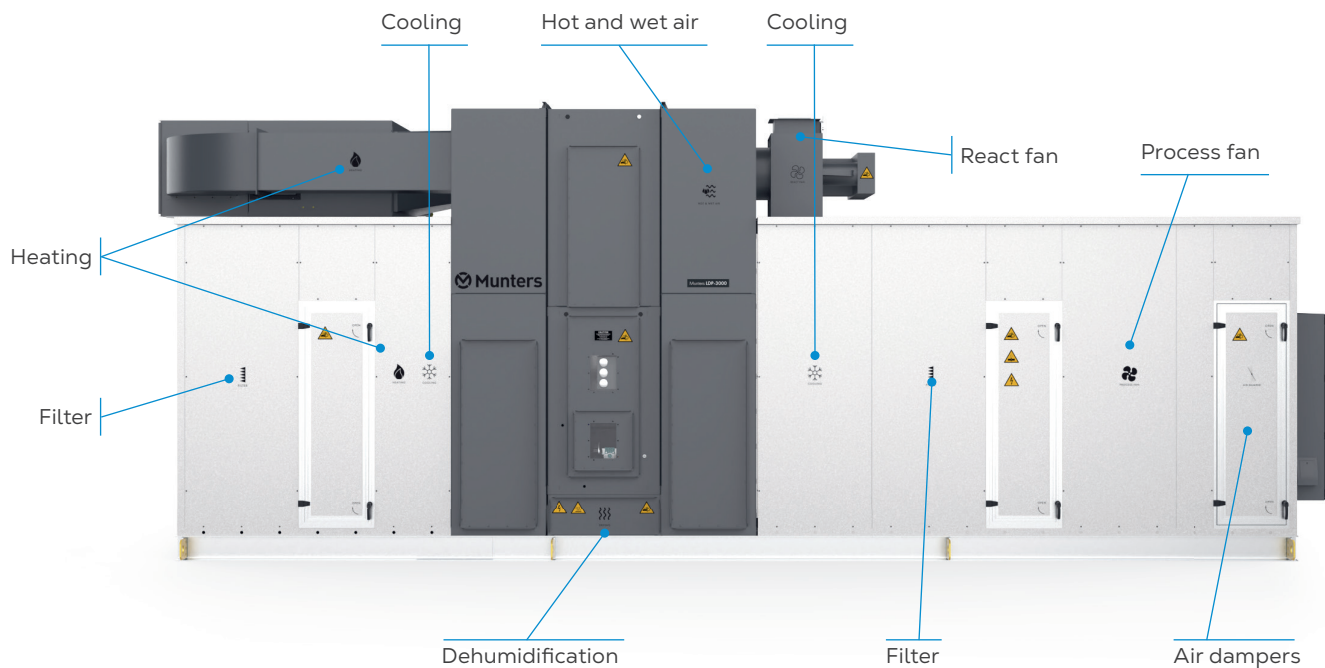
Quality throughout the system

All components like fans, filters and coils can be configured to fit the requested application. A wide range of standardized components is selectable but special designs are also possible to ensure the Munters LDP is the best fit for your application. The total system is balanced in component selection, and everything is designed to operate as energy efficiently as possible.

Smart selection process

Genesys is our innovative and intuitive selection tool, which ensures that you get the right Munters solution to your specific needs.

Our sales engineers can then provide you with drawings, flow diagrams, and technical specifications and costs, giving you a clear picture of the offer and the benefits. You get the detailed information you need, with easily accessible documentation from the start.



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