

GREEN POWERPURGE™

Ultra-Low Dewpoint Dehumidifiers



Product Description

Ultra-low dewpoints are required (-70°F/56°C supply air) to achieve high levels of product yield and quality control, for lithium-ion battery dry rooms and other applications for lithium primary batteries, thermal batteries, and other processes using moisture sensitive components. Most battery manufacturers request that a room's humidity/average moisture levels be maintained as low as -40°C dewpoint (½ % Relative Humidity at 72°F) or -33°C dewpoint (1% Relative Humidity at 72°F).

Munters Green PowerPurge™ desiccant systems were introduced in 2009 to meet the needs of advanced battery manufacturers who needed excellent dewpoint control, while at the same time using significantly less energy than older desiccant systems. Green PowerPurge™ easily can supply dewpoints at -70°F/-56°C supply air while saving between 25% to 45% of the a dry room cooling bill and 35% to 50% of desiccant reactivation energy bill.

PRODUCT INFORMATION

GREEN POWERPURGE™



BENEFITS

- Easily achieves -70°F dewpoints
- Optimizes energy for cooling and reactivation heat
- Annual energy savings are 25% to 45% versus other purge systems
- Qualifies for LEED® building certification
- Over 45 systems installed in the Li-ion battery industry

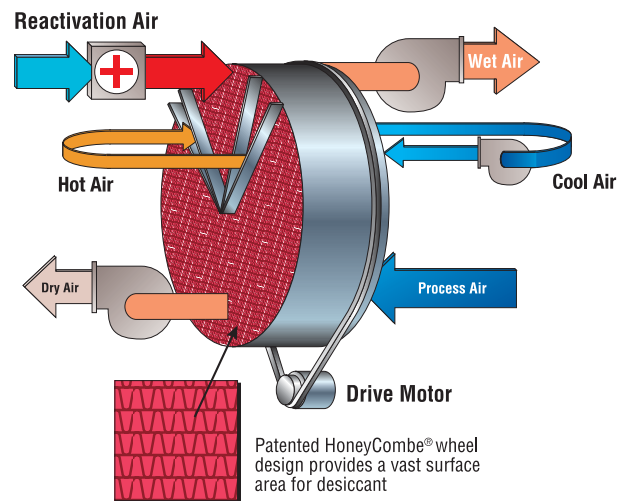
Munters Green PowerPurge™ System Sizes

Model	Moisture Removal	General Dimensions	Supply Air Volume to Dry Room (cfm)	Supply Dewpoint (°F/°C)
	with -40 °C/F Return Air	L x W x H (in.)		
GPP-2250	4,930 gr/hr (.70 lbs/hr)	330 x 43 x 54	2250	-70°F/ -56°C
GPP-4500	9,861 gr/hr (1.40 lbs/hr)	370 x 62 x 106	4500	-70°F/ -56°C
GPP-9000	19,723 gr/hr (2.81 lbs/hr)	424 x 82 x 121	9000	-70°F/ -56°C
GPP-15,000	32,872 gr/hr (4.69 lbs/hr)	436 x 100 x 138	15,000	-70°F/ -56°C
GPP-20,000	43,830 gr/hr (6.26 lbs/hr)	492 x 120 x 138	20,000	-70°F/ -56°C
GPP-30,000	65,745 gr/hr (9.39 lbs/hr)	492 x 160 x 166	30,000	-70°F/ -56°C

Product Advantages

- » Smaller chillers or DX condensing units
- » Lower kW for desiccant reactivation
- » No ultra-dry dry room air required for desiccant reactivation
- » 100% welded aluminum systems to eliminate leakage/infiltration
- » PLC controls using Siemens or Allen Bradley controls
- » System flexibility for fans, filters, coils, controls
- » Ethernet and/or BacNet compatibility
- » Gas, electric or steam reactivation
- » Chilled water, Glycol or DX refrigeration cooling

Green PowerPurge™ Wheel Flow



Dry Room System Checklist

- Desiccant DH system does *not* steal dry air for reactivation
Green PowerPurge™ (GPP) uses 100% ambient air
- Desiccant DH system is all-welded construction
GPP an all-welded construction
- Desiccant DH system supplies -70°F dewpoint at all times
All GPP systems are ≤ -70°F supply air
- Desiccant DH wheel has Munters HPX desiccant, not silica gel or pure molecular sieve desiccant
All GPP systems use HPX as a standard