

Product sheet

# Oasis IEC

Indirect evaporative integrated systems



#### Features

- → Up to 500kW cooling capacity per unit, depending on the Delta T and altitude
- → Three modes of cooling: Dry heat exchanger (HX), indirect evaporative cooling (IEC), IEC with trim direct expansion (DX)
- → Munters polymer tube heat exchanger technology
- $\rightarrow$  Reduced peak operating kW
- → Low annual pPUE
- → High-performance and resilience on extremely hot days



Data Hall

Roof mount

Munters Oasis<sup>™</sup> IEC indirect evaporative integrated systems with indirect evaporative cooling (IEC) provides energy-efficient data center heat rejection and low total cost of ownership.

Oasis units use our patented Evaporative Polymer Heat Exchanger (EPX). This heat exchanger utilizes a unique polymer tube design that provides efficient heat rejection while operating wet or dry. Corrosion-resistant and elliptical, the polymer tubes flex slightly during normal operation, shedding mineral scale that can accumulate during the indirect evaporative cooling process. The Oasis IEC product line can significantly reduce refrigeration usage and installed capacity in virtually all climates, minimizing the connected electrical load and compressor maintenance.

Munters is a trusted leader in data center cooling technologies, providing reliable and efficient solutions that maximize energy savings for our customers.



Data Hall

Perimeter mount

## Options

- → Trim direct expansion (DX) or chilled water supplemental cooling system
- → G4 filter box panel
- → Mirror access models
- → Modbus or BACnet controls
- → Multiple airflow configurations
- → Roof or slab mount
- ightarrow Supply and return air isolation dampers
- ightarrow EC motor-driven process and scavenger fans
- ightarrow Corrosion-resistant coating on condenser coils
- ightarrow Automatic transfer switch
- → Containerized shipping solution (Oasis DCiE)
- → Patent-pending staged spray designed for water conservation.







## Oasis performance table

Unit	Up to (kW)	Dimensions* LxWxH (cm)	Area (m²)	Airflow (Sm³/h)
Oasis 100	125	592 x 136 x 417	8.05	10,000 - 24,000
Oasis 200	250	592 x 258 x 417	15.27	22,000 - 48,000
Oasis 300	375	592 x 394 x 417	23.32	32,000 - 72,000
Oasis 400	500	592 x 516 x 417	30.55	44,000 - 96,000
*Denending on four design				

\*Depending on fan design

#### Modes

#### Mode 1 - Dry heat exchanger (HX)

The EPX operates as a dry air-to-air heat exchanger. Warm air from the data hall passes through the polymer tubes and cool ambient air flows over the exterior of tubes.

## Mode 2 - Wet (IEC)

Spray nozzles wet the exterior of the EPX tubes, and scavenger air flows over these wet tubes to extract heat from the data center by evaporating the water.

### Mode 3 - Wet + DX cooling

Supplementary DX or chilled water cooling installed after the EPX for extreme conditions.

## Oasis with DX cooling

Munters Oasis indirect evaporative integrated systems use indirect evaporative cooling to reject data center heat using lower ambient wet bulb conditions. This approach maximizes the system's cooling potential.

- Evaporatively cooled air onto the condenser increases DX operational efficiency
- Reduction or elimination of mechanical DX cooling load
- Reduction in peak operating kW compared to operating in dry mode
- Annualized mechanical pPUE 1.05-1.15

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