



# IECS-MAX

## Integrated Environmental Control System

### For

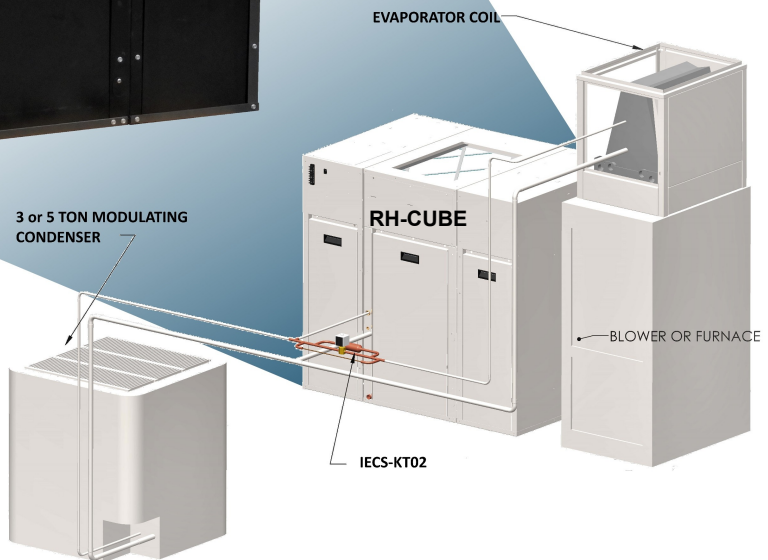
## MODULATING CONDENSERS

# THAT PIGGYBACKS ON YOUR A/C OR HP MODULATING CONDENSER!

**RH-CUBE 18 DX  
DEHUMIDIFIER**



*Save installation time  
and money by using the  
existing Modulating  
Condenser Condenser!*



Note: The IECS-MAX system requires an Ecobee Smart thermostat.

The IECS-MAX is a high efficiency, high capacity, split-air dehumidifier and cooling system that does not require its own condenser. Instead, it shares the existing modulating condenser.

The IECS-MAX is ideal for whole home dehumidification, for offices, retail space, dental offices, anywhere where increased dehumidification is needed. We also provide solutions for the pharmaceutical, food storage, and electronics industry.

## IECS-MAX Features

- Modulates to maintain a dewpoint of 39° F (4° C) to maximize dehumidification.
- Decouples dehumidification from cooling. Minimizes sensible cooling when there is only demand for latent cooling.
- Split-air architecture - does not add to the air conditioner’s heat load.
- High capacity - removes up to 107 gal (400 liters) per day.
- High efficiency - removes up to 6.2 liters per kWh of humidity.
- Decoupled operation for easy integration into existing HVAC systems – It operates independently of the air conditioner and can dehumidify twenty-four hours a day whether or not the air conditioner is running.
- Modular for easy installation – can be disassembled into three sections so that it can be maneuvered through narrow openings and tight spaces, and be installed by a single technician.
- Versatility - Four choices for delivery air duct connections simplifies installation.
- Serviceability - Easily serviceable for cleaning and

maintenance from the front of the unit.

- Inexpensive to service - Built from easily sourced off-the-shelf HVAC components.
- Serviceable by any certified HVAC technician without the need for specialized training.

## How It Works

The IECS-MAX consists of DewAir’s **RH-Cube 18** dehumidifier and an **IECS-KT02** adapter kit. The adapter kit allows the existing condenser output to be shared between its own evaporator coil and the evaporator coil inside the RH-Cube 18. The kit controls the amount of refrigerant that is directed to either coil based on the settings of the Ecobee Smart thermostat.

When the Ecobee Smart thermostat calls for dehumidification, the air conditioner’s condenser is turned on (if it is not already on). The IECS-KT02 directs between 1 ton and 2 tons of cooling to the RH-Cube 18. If there is also a demand for sensible cooling, the remaining cooling generated by the condenser is directed to the air conditioner’s evaporator coil.

The table below shows how much water removal and how much (sensible) cooling an IECS-MAX systems deliver for typical indoor conditions and for various sizes of air conditioning condensers.

## Dehumidification Performance

Below is a chart of the IECS-MAX’S performance:

		3 Ton	5 Ton
<b>80°F</b> <b>60% RH</b>	Cooling (BTU)	6700-12000	6700-36000
	Water Removal (lbs/h)	22	22
<b>78°F</b> <b>45% RH</b>	Cooling (BTU)	6300-24000	6300-48000
	Water Removal (lbs/h)	11	11
<b>75°F</b> <b>50% RH</b>	Cooling (BTU)	5400-23000	5400-47000
	Water Removal (lbs/h)	11	11