

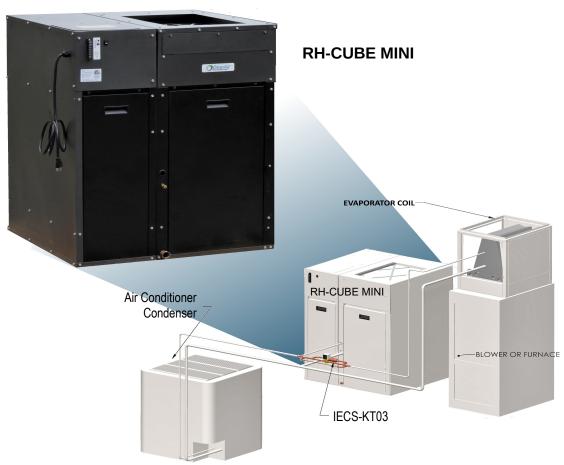
# **IECS-MINI**

# **Integrated Environmental Control System**

### For

# Whole Home Dehumidification

# THAT PIGGYBACKS ON YOUR AIR CONDITIONER'S CONDENSER!



Save installation time and money by using the air conditioner's condenser!

The IECS-MINI 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-MINI is ideal for whole home dehumidification, for small offices and retail spaces dental offices, anywhere where increased dehumidification is needed.

#### **IECS-MINI Features**

- Split-air architecture does not add to the air conditioner's heat load.
- High capacity removes up to 13 lbs/hr (6 l/hr)
- 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 twentyfour hours a day whether or not the air conditioner is running.
- Modular for easy installation can be disassembled into two sections so that it can be maneuvered through narrow openings and tight spaces, and be installed by a single technician.
- Versatility Three 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-MINI consists of DewAir's **RH-Cube MINI** dehumidifier and an **IECS-KT03** 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 Mini. The kit controls the amount of refrigerant that is directed to either coil based on demand.

When dehumidification is called for, the air conditioner's condenser is turned on (if it is not already on). The IECS-KT03 directs between 1 ton of cooling to the RH-Cube MINI. 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-MINI systems deliver for typical indoor conditions and for various sizes of air conditioning condensers.

### **Dehumidification Performance**

Below is a chart of the IECS-MINI's performance at 80°F and 60%RH

	2 Ton	2.5 Ton
EFFICIENCY (I/kWh)	5	5
WATER REMOVAL (lbs/hr)	12	13
LATENT COOLING ( BTU)	11520	11520
SENSIBLE COOLING (BTU)	8000	12000
TOTAL COOLING (BTU)	19520	23520
LATENT / TOTAL BTU RATIO	0.59	0.49
СҒМ	700-900	600-900