

**TOOLKIT**

TECHNOLOGIES



# HVAC Training Units

**FOR WORKFORCE DEVELOPMENT**

Train technicians the way they work in the field. Our training units are fully functional HVAC systems designed to simulate real-world problems including diagnostics, commissioning, and performance testing. These units are powered by the same application technicians use every day.

**HEAT PUMP + GAS FURNACE**  
*FOR DUAL-FUEL MARKETS*

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**HEAT PUMP + AIR HANDLER**  
*(OPTIONAL ELECTRIC HEAT) FOR HEAT PUMP TRAINING*

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**STRAIGHT COOL + AIR HANDLER**  
*(OPTIONAL ELECTRIC HEAT) FOR COOLING-FOCUSED REGIONS*

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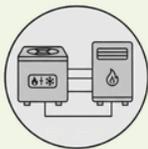
**HEAT PUMP MINI SPLIT**  
*FOR DUCTLESS SPECIALIZATION*



# Versatile System Configurations

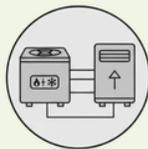
Each configuration is built on a T-8020 structural aluminum frame supported by six locking casters. Every unit is compact, mobile, and designed to fit through a standard 36" ADA-compliant doorway.

Available in multiple variations to cover every major residential system. The most popular are:



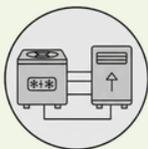
## Heat Pump + Gas Furnace

for dual-fuel markets



## Heat Pump + Air Handler

(optional electric heat) for heat pump training



## Straight Cool + Air Handler

(optional electric heat) for cooling-focused regions



## Heat Pump Mini Split

for ductless specialization



## Power & Safety

- Full 120/240V 60Hz service rated for 30 amps with twist-lock plug and 10' SO cord
- Surge protection, breakers, fused disconnect, and power monitoring

## Training Components

- Clear viewing doors for viewing the coil and blower enhanced by fully adjustable LED lighting
- The indoor fan speed and condenser fan speed are fully adjustable
- 50" QLED display for demonstrations and guided lessons
- Condenser stand with wash pan for cleaning demonstrations
- Water overflow sensor, condensate bucket, and clear trap with cleaning brush
- One integrated tablet mount, one stopwatch/timer, and one recovery tank for charging exercises

## Optional Add-ons

- Integrated return air filter grille
- Add-on media air cleaner
- Flex return/supply ducts for airflow testing

## Built-In Fault Simulation

Teach diagnostics by simulating real field conditions. Each unit includes built-in, switchable faults for refrigerant, airflow, electrical, and condensate systems:

### Refrigerant & Airflow Faults

- Suction/liquid line restrictions
- Plugged liquid line dryer
- Compressor not pumping
- Low/high refrigerant charge
- Dirty filters, coils, or condenser
- Adjustable condenser fan speed
- Low/high static pressure conditions

### Electrical & Control Faults

- Open thermostat or line voltage circuits
- Blown fuses and failed capacitors
- Failed contactors and components

### Other Faults

- Plugged condensate overflow
- Simulated duct leakage
- Adjustable fault combinations for complex scenarios

