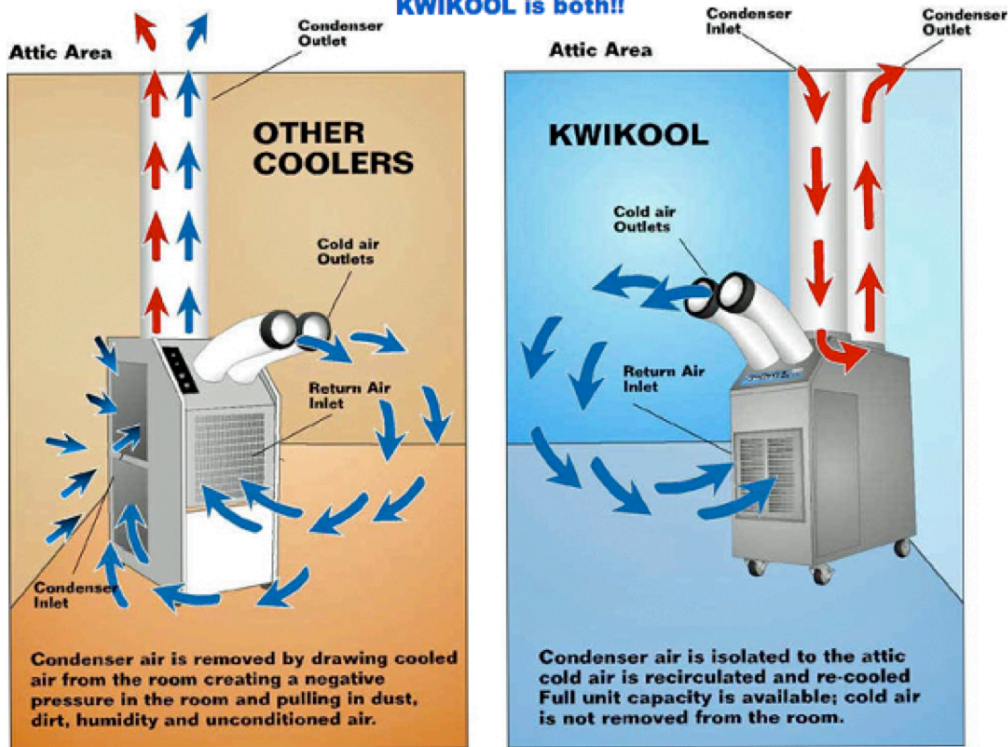


# I/O Integral Condenser



Is it a spot cooler or a portable air conditioner??

**KWIKOOL is both!!**



Many *spot coolers* claim to be portable air conditioners, but in fact they are not. To be an air conditioner, the condenser's inlet **MUST** be isolated from the conditioned space. In other words, if the unit only has one condenser duct (an outlet) then it is a spot cooler.....not air conditioning!!

KwiKool's unique I/O Integral Condenser™ system brings in air from an outside source to cool its condenser and then returns the hot air to an outside source, totally isolating the condenser section from the conditioned space. Other *spot coolers* cool their condensers by utilizing cold air from the room. This creates a negative pressure (vacuum) in the room which sucks in dust, dirt, humidity and hot air from under doors, cracks in the ceiling tile.....anywhere! This is a very poor environment for any type of equipment. Because these types of units use room air to cool their condensers, their effective capacity is greatly reduced.





## How does Kwikool's Strategic Air Center stack up to Spot Coolers?

	Kwikool SAC	MC	KW
I/O Integral Condenser	<b>Standard</b>	Add on External Kit	Add on External Kit
Remote Control Capability	<b>Standard</b>	N/A	N/A
Expansion Device	<b>TXV</b>	Cap Tubes	Cap Tubes
Thermostatic Controls	<b>Microprocessor</b>	Digital/Analog	Analog
Freeze Protection	<b>Constant Pressure w/ Fan Control</b>	Freeze Stat	Freeze Stat
High Pressure Switch	<b>Standard</b>	Some Models	Standard
Low Pressure Switch	<b>Standard</b>	N/A	N/A
Auto Restart	<b>Standard</b>	Some Models	Standard
Short Cycle Protection	<b>Standard</b>	Some Models	Standard
Low Ambient Controls	<b>Standard</b>	N/A	N/A
Externally Accessable Service Ports	<b>Standard</b>	N/A	N/A
Sight Glass /Moisture Indicator	<b>Standard</b>	N/A	N/A
Filter Dryer	<b>Standard</b>	N/A	N/A
Fan Cycling	<b>Standard</b>	N/A	N/A
Independent Evap & Condenser Motors	<b>Standard</b>	Single Motor (most models)	Standard
High Lift Condensate Pump	<b>Standard</b>	Option	Option
Easy Access Service Door	<b>Standard</b>	N/A	N/A
Rifle Tube Coils	<b>Standard</b>	Spiny Fin	N/A
Audible Alarm	<b>Standard</b>	N/A	N/A
LCD Visual Alarm Display	<b>Standard</b>	N/A	N/A
Touch Pad Controls	<b>Standard</b>	Some Models	N/A

\*MC and KW signify name brand spot coolers and information publish is accurate to the best of our knowledge and based on published information from those manufacturers. KWIKOOL assumes no liability for the accuracy of this comparison chart.

*KwiKool's Strategic Air Center... Is it a Spot Cooler??? Or is it a Portable Conditioner???* **The answer is YES! It is both.**

**A SPOT COOLER DEFINED:** A spot cooler is a portable device that blows cold air on a “spot” or location such as a person or process. Most “spot cooler” manufacturers claim to be capable of functioning in “all types of environments,” but are in essence a “high end” window unit on wheels. By virtue of its design, the spot cooler’s capabilities are very limited. These units are typically a basic capillary-tube system designed primarily for higher ambient temperature, with very few refrigeration controls to allow them to operate effectively in anything other than a warehouse type environment. All air conditioning units designed for higher ambient temperatures must protect themselves from freezing at temperatures below about 75°F. Most spot coolers use a freeze stat, which simply shuts the compressor off if it starts to freeze. This means that if you want your server room to be 68°F, you can never reach the desired temperature with this unit. In addition, their condenser inlet is located on the side or back of the unit. This unit draws cold air directly from the room which it has just cooled, drastically reducing the effective cooling capacity of the unit, and creating a negative pressure or vacuum in the room. This brings the condenser air stream into the conditioned space. The diagram at this link ([I/O CONDENSOR](#)) illustrates how spot coolers utilize cold air from the room to cool their condensers. If air is removed from the room, more air must come back into the room – from under doors, around windows and most often from around ceiling tiles, bringing with it dirt, dust, heat and humidity – all of the things you don’t want in your controlled environment. This is an unbalanced airflow system.

#### **TRUE AIR CONDITIONER DEFINED:**

In contrast to a spot cooler, an air conditioner is designed to cool an enclosed area and has independent air streams. It’s evaporative air stream is located inside the conditioned space and the condenser air stream is located outside of the conditioned space.

**THE BEST OF BOTH.....THE STRATEGIC AIR CENTER** The KwiKool Strategic Air Center can truly be used in almost any environmental condition. It is rated from 60° to 110°F and functions perfectly as a spot cooler. But it does more – much, much more. The KwiKool Strategic Air Center has a thermostatic expansion valve which adjusts the flow of freon to suit the ambient conditions, Also, its sophisticated microprocessor control system and advanced constant pressure and fan-control freeze protection allows the unit to maintain a temperature set point with pinpoint accuracy for critical environments at temperatures down to 60°F. The diagram this link ([I/O CONDENSOR](#)) shows KwiKool’s unique I/O Integral Condenser system compared to a spot cooler. This exclusive feature brings air from outside of the conditioned space to cool its condenser, then pumps the hot air back outside of the cooled room totally isolating the condenser air from the enclosed area. This is a balanced air flow system.

