

# THE COOLING POWER OF WATER

### INTRODUCTION

As a leader in portable heating and cooling solutions, Spot Coolers is committed to advancing new products and solutions across industries. That starts with understanding the insights and trends that affect our customers and sharing that knowledge so we can move forward together—with purpose and confidence. Our mission at Spot Coolers is simple: keep our partners in control of their businesses at all times while we take care of their heating and cooling outages, planned or otherwise.

# **EQUIPMENT OVERVIEW**

Water-cooled portable air conditioner units are an excellent option for temporary and emergency cooling needs. They can be used on their own, or in tandem with an air-cooled unit as part of our Better Together™ package at Spot Coolers. They are easy to move and install, requiring little more than a water source, outlet, and thermostat. Available in cooling capacities from one to five tons.

Ducting air in or out of a space can be challenging. One way to solve the issue is to use a water-cooled portable air conditioner. Available in cooling capacities from one to five tons, these units plug into readily available standard commercial power. All that's required to apply them is access to a water source and drain. Connection is quick and easy, and the results can be felt immediately. It takes little more than hooking up hoses, plugging the units in and setting the thermostat to the desired temperature.



### PRODUCT SOLUTIONS

OceanAire's water-cooled portable air conditioners offer an extremely efficient and effective way to control the climate in any sized room. Because water-cooled air conditioners do not discharge hot air, they do not require exhaust ducting and are used to great effect in enclosed areas.

# OCEANAIRE'S RANGE OF WATER-COOLED PORTABLE AIR COOLER UNITS INCLUDE:



### **PWC SERIES**

(12,000 BTU/H TO 60,050 BTU/H)



### **OWC SERIES**

(12,000 BTU/H TO 60,050 BTU/H)

**Deluxe Water-Cooled Air Conditioners** 

# HOW DO WATER-COOLED PORTABLE AIR CONDITIONING UNITS WORK?

Portable air conditioner units that are water-cooled simply require access to an appropriate power source, a source of water, and a drain. Our units ship with hoses as an accessory. They will connect to any standard sink, but can also be used in janitor and utility sinks, or used with any other type of waste water outlet.

# ADVANTAGES OF WATER-COOLED PORTABLE AIR CONDITIONERS

There are many advantages to using a water-cooled air conditioner to cool a space. Here are just a few:

- No exhaust / ventilation / hot air outlet required
- No negative air pressure caused by ducting
- Water-cooled air conditioners work better in areas with high ambient temperatures (because they use water, not surrounding air to cool the condenser)
- They can be used in extremely hot areas hotter than air cooled units can
- Offer a greater cooling capacity (5 ton air cooled single phase units require
  50 amps / 5 ton water-cooled require 30 amps



# **PWC SERIES**

(12,000 BTU/H TO 60,050 BTU/H)

The Oceanaire PWC series are portable water-cooled air conditioners designed for permanent or temporary spot cooling applications. The entire air conditioning unit has been built in an attractive metal cabinet, equipped with heavy-duty casters for mobility. All PWC models come with a 10-foot power cord for electrical connection and added mobility in service.

These spot coolers are designed to direct air to specific areas or objects through a discharge grill located on the upper-front of the unit, while rejecting heat in the waste water. The PWC models range in cooling capacities from 12,000 BTU/H to 60,050 BTU/H to satisfy most space cooling requirements.

The PWC is a self-contained unit with the entire cooling system, fan motors and electrical components neatly arranged in a gray polyester powder coated metal cabinet. When connected to the proper source of electrical power, a 24-volt thermostat controls the PWC unit to provide the desired level of comfort and cooling.

A wide variety of accessories and factory installed options are available for the PWC units allowing for improved performance and versatility.



## **OWC SERIES**

# (12,000 BTU/H TO 60,050 BTU/H)

The OceanAire OWC is a portable water-cooled air conditioner designed for permanent or temporary spot cooling applications. The entire air conditioning unit has been built in an attractive metal cabinet, equipped with heavy-duty casters for mobility.

All OWC models come with a 10-foot power cord for electrical connection and added mobility in service. These spot coolers are designed to direct air to specific areas or objects through a discharge grill located on the upper-front of the unit, while rejecting heat in the wastewater. The OWC models range in cooling capacities from 12,000 BTU/H to 60,050 BTU/H to satisfy most space cooling requirements.

The OWC is a self-contained unit with the entire cooling system, fan motors and water-side components neatly arranged in a gray polyester powder coated metal cabinet. When connected to the proper source of electrical power, the digital thermostat controls the OWC unit to provide the desired level of comfort and cooling.

A wide variety of accessories and factory installed options are available for the OWC units allowing for improved performance and versatility.



# PORTABLE WATER-COOLED AIR CONDITIONERS FOR HOSPITALS

Water-cooled portable air conditioner units are uniquely positioned to provide the perfect solution to today's hospital spot cooling requirements.

During the COVID-19 pandemic, a lot of hospitals employed negative air machines to help mitigate the spread of the airborne viruses and contaminants from one room to another. Unfortunately, when using a negative air machine, you are by design, exhausting more air from a room than is being delivered to a room. This overwhelms the existing air conditioning system and supplemental air conditioning is needed to maintain a comfortable space within the hospital. An air-cooled portable unit would not operate properly under a negative air situation because it needs to contend with the negative air machine for condenser air. Most air-cooled units are not designed for these levels of negative pressure and do not have a powerful enough blower to perform properly.

# SOME OF THE MORE POPULAR APPLICATIONS FOR OCEANAIRE PORTABLE AIR CONDITIONER UNITS IN HOSPITALS INCLUDE:

- Recovery Rooms
- Waiting Rooms
- Surgical Suites
- Nursing Homes
- MRI Rooms
- X-Ray Rooms
- Hospital Laboratories
- Hospital Basements
- Hospital IT and Server Rooms
- Electronic Equipment Rooms
- Hospital Office and Consultation Rooms
- And so much more

An OceanAire portable water-cooled unit is the perfect solution for cooling hospital lobbies, patient rooms, breakrooms, waiting rooms, MRI rooms, X-ray rooms and other hospital areas. Every hospital room has a water source (sink, bathroom) where you can attach our water hoses to bring water to the unit and drain the water as well.

# COMMON MYTHS ABOUT WATER-COOLED UNITS

#### INTRODUCES WATER TO THE AIR

No, it does not. People think a water-cooled acts like an evaporative cooler. It does not. The water is not exposed to the air flow at all. The water runs through a coaxial coil.

#### THE WATER RUNS ALL THE TIME

No, the water does not run all the time. The water only runs through the unit when the compressor is on. When the unit is not calling for cooling, the water is not running.

# IT IS VERY EXPENSIVE TO RUN A WATER-COOLED UNIT

Not as expensive as you might think. Because there is only 1 blower motor in the water-cooled unit, it uses far less electricity than the air-cooled unit that has 2 blowers in it. Also, the average cost of water in the United States is about \$1.50 per every 1,000 gallons. On average, our largest water-cooled unit uses 3gpm with an average daily cost of \$2.70.

# HOT AIR IS DISCHARGED FROM WATER-COOLED UNITS

No, there is no hot air discharged from a water-cooled unit. The heat is transferred to the water.





## CONCLUSION

Spot Coolers has the right solutions ready for you nationwide, wherever and whenever you need them most. Contact us today!

SPOT-COOLERS.COM 800-367-8675 SPOTCOOLERS@CARRIER.COM

#### Citations:

oceanaire-inc.com/water-cooled-portable-air-conditioners/ "Water-Cooled Portable Air Conditioners"

oceanaire-inc.com/hospital-portable-air-conditioning "Portable Water-Cooled Air Conditioners for Hospitals" ashe.org/negative-pressure-rooms

