



# Packaged Condensate Harvesting Systems from Wahaso

### Wahaso Model COND-UV20-250 and 500

Save water with these turnkey, commercial-grade systems ready for installation in your facility.

- Commercial facilities typically dispose of cooling system condensate that can be an excellent source of harvestable water.
- A typical building can produce thousands of gallons of condensate per week that can be readily prepared (harvested) for reuse in cooling tower make-up, irrigation, wash water, and other uses.
- One gallon per minute of condensate collected at peak can yield 150-200,000 gallons of water savings per year. A typical 50,000 square foot building can yield 1-10 gallons per minute during peak cooling times, depending on the building's location.
- Wahaso's commercial-grade condensate harvesting system is prepackaged and ready to go to capture this water resource in an affordable, easily installed solution.
- Wahaso's Models COND-UV20-250 and 500 are complete, integrated systems that capture, treat and repressurize condensate from a building's air handling units to conserve municipal water used for non-potable purposes. Each system sends treated water to reuse at up to 40 GPM at a variable pressure of 65-120 PSI.

## Harvesting Condensate is ideal for several applications:

#### - COOLING TOWER MAKE-UP

Supplementing municipal make-up in evaporative cooling systems at 15-40 GPM (Up to 10,000 gallons per day). This is an ideal use for harvested condensate as the cooling tower water requirements coincide with peak condensate production.

#### - LANDSCAPE IRRIGATION

Spray and drip irrigation systems with combined zones needing 40 GPM or less, typically 1,000-7,000 gallons per day. For buildings that cool without an evaporative system, harvested condensate can supplement or replace municipal water used for irrigation. Condensate production coincides with irrigation needs and is not dependent on rain events.

#### -TOILET FLUSHING

Flushing up to 10 toilets or urinals in small office building or other public building. This is an ideal solution for facilities without an evaporative cooling system that can practically run a non-potable supply lines to existing fixtures or to new fixtures in a remodel.



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OPTIONAL CONDENSATE TRANSFER STATION

#### **Included Standard:**

- All listed components come pre-assembled, wired and plumbed on an HDPE skid with Schedule-80 PVC piping, tested at our facility.
- Wahaso Control System in NEMA12 box mounted to skic with PLC operational software.
- Includes installation and operations manuals
- Wahaso technical support via phone for installation, start-up and operational questions.
- Limited one-year warranty on entire system.

#### Not included in this system:

- All plumbing to and from system or other components.
  Any skilled and licensed local plumber can install the system
- Condensate transfer stations. Required when condensate cannot be gravity fed to skid. Standard units available from Wahaso.
- Local permits or fees.
- On-site installation or start-up support. These are available for an additional fee.

**Notice:** These packaged systems are designed to meet a wide range of applications for water reuse supply and demand. Wahaso specializes in custom designed systems that can meet any size and type of water reuse. Please contact us and let us design a system that best fits your needs.

**TREATMENT** A two-step treatment system ensures safe water quality for reuse. Bag filter and UV sanitation steps effectively eliminate pathogens such as Legionella and viruses that can pose a human health risk.

**PRESSURIZATION** The commercial-grade pump is industry standard stainless steel and includes variable frequency drive to match pump pressure to repressurized demand.

 Vertical 3 H.P. Grundfos pump recirculates condensate in holding tank through filtration and sanitation system to maintain water quality.

**CONTROLS** Commercial-grade Wahaso Controls monitor and activate system operations. Comes standard with connectivity points and software for integration into Modbus-compatibley building automation systems. Other protocols (like BACNET) available as an option. PLC software has the following features:

- Monitors and reports system status and alarms
- Tracks total harvested water produced
- Manages pump discharge pressure and PSI adjustment
- Monitors pump status reports fault alarm
- Digital recording and reporting of holding tank level
- Tracks remaining UV bulb life with a safety interlock upon UV system fault
- Monitors bag filter status and alerts when service is required

**MUNICIPAL WATER MAKE-UP** The basic system does not include automated back-up with municipal water. Optional back-up system automatically reverts system output to municipal water supply and pressure when holding tank is empty or operational issue occurs.

**MAINTENANCE** Our systems are designed to require minimum maintenance for weeks or months at a time.

- Bag filters are easy and inexpensive to replace every few weeks or months, depending on stored water quality.
- Ultraviolet sanitation system operates 18,000 hours, or nearly two years of continuous operation.

**RETROFIT FRIENDLY** Streamlined tank and skids for both models are only 31" wide and 66" tall to fit through a standard mechanical room door.