



# Modular & Truly Containerized Desalination Reverse Osmosis Systems For Seawater Desalination

**PROVIDING THE BEST RETURNS FOR YOUR INVESTMENT.**

## NETWORK READY

Ethernet port included in our PLC you can connect and pull all the information you need.

**REMOTE MONITORING INCLUDED IN ALL OUR SYSTEMS**

## WELL KNOWN AND PROVEN COMPONENTS

All components in our systems had been proven in the field for years, easily available through worldwide distribution network

## LARGER SWRO SYSTEMS MAGNA SOLUTIONS:

Are you looking for bigger systems, take a look of our **MAGNA** Series which offers pre-engineered solutions with capacities for **1500m3d**, **3000m3d** and **5000m3d**.



Advanced Equipment and Services Inc. is a global provider of pre-engineered and custom-designed water treatment solutions including many standard features which make them suitable for the most demanding applications.

**ARKQUA®** systems are a pre-designed and pre-engineered “plug and run” truly containerized seawater desalination solution, 100% modular, which provides the flexibility and scalability to growth your plant capacity and footprint step by step based on your unique water needs. **ARKQUA®** systems come in four models: **ARKQUA200**, **ARKQUA500**, **ARKQUA1000**, **ARKQUA1500**.

**ARKQUA®** Systems provide all what you need on a single container, RO, CIP flushing and MMF are also included, no need for extra space. **ARKQUA®** is a “plug and run” solution which minimize commissioning time and simplify operation.



## Main Advantages

### FAST DEPLOYMENT

**ARKQUA®** a pre-designed and pre-engineered “PLUG & RUN” solution which facilitates implementation and commissioning in a timely matter.

### MODULAR

**ARKQUA®** is a modular solution which allows for flexible growth based on your water needs.

### COST EFFECTIVE

**ARKQUA®** provides the flexibility to grow step by step, avoiding big investments at front and with the confidence of having a full integration as the plant increase capacity.

### FULLY AUTOMATED CONTROL

**ARKQUA®** is a fully automatic system that through PLC and HMI is managed from a single point. Adding remote monitoring and control from any device.





## Features and Benefits



**ARKQUA®** systems are built in a standard 40' ISO container, R19 thermal and acoustic insulation protects equipment from temperature fluctuations and prevent noise which can disturb the environment. Systems are engineered for fast deployment integrating the most energy efficient components.

### INDUSTRIAL SEAWATER STANDARD SERIES ARKQUA®

Model	Output	Power	Recovery
ARKQUA200	200M3D	56kw	45%
ARKQUA500	500M3D	74kw	45%
ARKQUA1000	1000M3D	112kw	45%
ARKQUA1500	1500M3D	150kw	45%

#### STANDARD COMPONENTS:

- 40'HC Container designed for oversea transportation
- High Pressure Centrifugal RO Feed Pump w/ 400/460V 3 phase 50/60 Hz TEFC motor
- Energy Recovery Device Turbo Charger
- VFD for RO Pump & RO Feed Pump
- Digital flowmeters
- PLC
- High and Low-pressure switches
- Isolation butterfly valves
- Integral permeate flush and CIP system

#### CONTROL AND POWER:

- PLC with Ethernet card and spare cards
- 6-inch HMI
- Remote start/stop & alarm capabilities
- Zero recovery flush on shutdown
- Power: 400/460V, 3 phase, 50/60Hz

#### ALARMS:

- Low pump suction pressure
- High pump pressure discharge
- Permeate water quality
- Low permeate flow
- High permeate flow
- Low reject flow
- Low/high voltage
- Phase protection
- Pump motor overload
- High membrane feed pressure
- Chemical tank protection level
- Flush storage tank level protection

#### REMOTE CONTROL AND MONITORING IN EVERY SYSTEM

Remote control and monitoring access is available in every system. HMI mirroring package with full control from any mobile device. With Remote Control and monitoring feature your system is only a few clicks away, wherever you are.



#### TECHNICAL SUPPORT

Commissioning, Start-up, operators training, maintenance training, retrofits and modernization are available.

[www.advancees.com/services/](http://www.advancees.com/services/)

#### ZERO DOWNTIME

We supply all the basic two years critical spare parts with our units.

All our systems are built with very well-known and proved components.

#### TURNKEY SOLUTIONS

We can provide the basic RO systems plus all pretreatment and Post treatment such us:

- Chemical injection systems
- Multimedia systems.
- Calcite contact tanks
- Ozono generators
- UV disinfection
- H2S removal

For more information on any of our products or services please visit us on the Web at:

[www.advancees.com](http://www.advancees.com)