

# Heron

## Small-capacity water treatment unit for drinking water production

### Technical datasheet



#### General information

**Installation:**

skid-mounted, standalone

**Dimensions (LxWxH):**

2,100 x 1,700 x 2,165 mm

**Shipping weight:**

500 kg

**Operation weight:**

2,500 kg

**Application:**

Drinking water production



#### Operating parameters\*

<b>Treated water capacity:</b>	1.5-2.0 m <sup>3</sup> /h (30–40 m <sup>3</sup> /d)
<b>Estimated water loss:</b>	10–25%
<b>Raw water quality:</b>	fresh water
<b>Treated water quality:</b>	drinking water, according to WHO standard

\*Highly depends on raw water quality

#### Treatment process

**Pre-treatment**

- pre-oxidation / disinfection
- coagulation
- pre-filtration

**Main treatment**

- ultrafiltration

**Post-treatment**

- disinfection (sodium-hypochlorite)

**Membrane cleaning**

- built-in CIP-system

#### Chemicals

<b>Coagulant:</b>	poly-aluminium-chloride (or similar)
<b>Disinfectant:</b>	sodium-hypochloride (or similar)
<b>Oxidant:</b>	potassium-permanganate (optional), sodium-hypochlorite (or similar)
<b>Membrane cleaning:</b>	<ul style="list-style-type: none"><li>• acid (ie. hydrochloric-acid, citric-acid, oxalic-acid)</li><li>• caustic (sodium-hydroxide)</li><li>• other cleaning agents</li></ul>

## Construction

<b>Skids:</b>	galvanized steel rail system
<b>Tanks:</b>	Polypropilene (plastic)
<b>Piping:</b>	u-PVC (plastic)
<b>Raw water tank:</b>	~ 600 l
<b>Clean water tank:</b>	~ 1,110 l
<b>Booster pump:</b>	~ 3,000 l/h @25m



## Connections

<b>Raw water inlet:</b>	d40
<b>Drinking water outlet:</b>	d40
<b>Slurry water outlet:</b>	d40
<b>Tank overflow outlet:</b>	d40
<b>Electric supply:</b>	3x220 V
<b>Installed electric power:</b>	
• Raw water pump	1 kw (can be system independent)
• Process pump	0.43 kW
• Backwash pump	1.27 kW
• Drinking water pump	0.43 kW
• CIP pump	0.43 kW
• CIP heating	1.0 kW
• Others	0.4 kW
<b>Maximum energy demand (approx):</b>	3.0 kW

## Operation and control

**Operation:** semi-automatic (daily routine automatic, CIP manual)

**Controller:** industrial PLC with built-in HMI-panel (touch-screen)

## Options & add-on items

Increased capacity (3–4 m <sup>3</sup> /h, 60–70 m <sup>3</sup> /d)
GSM
Laptop/tablet operation
Containerized implementation
Automatized CIP
Mini-lab
Extended guarantee
Training

## Main suppliers

Grundfos,  
Endress+Hauser,  
Schneider Electric,  
Georg Fischer,  
Cepex,  
Tri-High

Or equivalent  
can be supplied