



## Ridder NoNa<sup>+</sup>

### *Selective removal of sodium from drain water*

- ◆ Lowers sodium levels in hydroponics
- ◆ Improves plant health
- ◆ Increases crop yields
- ◆ Enables fertilizers to be reused
- ◆ Reduces your water footprint

### **Goodbye sodium, welcome extra yields**

Ridder NoNa<sup>+</sup> provides a solution to reduce sodium levels in drain water; it's the industry's first water treatment unit that enables sodium to be removed selectively in a continuous, one-step process. It allows growers to reap the benefits of recirculation without having to worry about unsafe high sodium levels in their irrigation water or the loss of expensive fertilizers.

### **Selective sodium removal with innovative technology**

The new groundbreaking combination of capacitive electrodesialysis and ion-selective membranes provides a cost-efficient solution to reduce yield threatening sodium levels in recirculation water. The technology avoids removal of the expensive reusable minerals Ca<sup>2+</sup>, Mg<sup>2+</sup>, PO<sub>4</sub><sup>3-</sup> and SO<sub>4</sub><sup>2-</sup>. What's more, it requires neither the addition of exchange ions such as potassium chloride, nor an additional step for water recovery.





# Ridder NoNa<sup>+</sup>

## The next step towards emission-free cultivation

- ◆ Lower sodium levels reduce risk of BER and Tip Burn
- ◆ High financial impact in hydroponic crops (ROI < 3 years)
- ◆ Lowers sodium levels by 20% per treatment
- ◆ Has a water use efficiency of 95%
- ◆ Easy integration into existing installations
- ◆ Less dependency on quality of supply water
- ◆ Lowers greenhouse water and fertilizer footprint

## Select your capacity

Notes:

- ◆ The capacities below are based on 20% sodium removal per treatment and a 20-hour run time per day.
- ◆ Example of 4% sodium removal: A sodium level of 5 mmol/L will be reduced by 0.2 mmol/L every day.

Three models available		Sodium removal target		
		2%	4%	8%
Drain water volume (± cultivation area)	50 m <sup>3</sup> /day (± 2.5 ha)		Ridder NoNa <sup>+</sup> 10	Ridder NoNa <sup>+</sup> 20
	100 m <sup>3</sup> /day (± 5 ha)	Ridder NoNa <sup>+</sup> 10	Ridder NoNa <sup>+</sup> 20	Ridder NoNa <sup>+</sup> 40
	200 m <sup>3</sup> /day (± 10 ha)	Ridder NoNa <sup>+</sup> 20	Ridder NoNa <sup>+</sup> 40	

## Easy integration into your greenhouse water cycle

