

Mobile EDI System

FACT SHEET

Electro deionisation for water application

Description and Use

The Veolia Mobile EDI Systems provide a quick and easy service to meet the needs of water users. Units are available for emergency, supplemental, or long-term requirements.

High Flexibility

- 24/7 on demand rapid deployment of mobile assets to support customer needs
- Can combine with other Veolia's mobile water products to enhance system capability
- Low operating risk, easy installation and set up
- Mobile EDI offers multiple configurations to best suit different feed flowrates

InSight* Enabled Fleet

- Demand prediction and quicker decisions on equipment performance ensuring optimal performance for our customers
- 24/7 data monitoring platform that is securely stored, processed, and analyzed to create meaningful and actionable information
- Focus on your business while Veolia takes care of the water

Typical Applications

Water demineralisation suitable for applications such as:

- Boiler feed water
- Rinse water
- Cleaning or processing water



Key Design Features

The Mobile EDI systems are CE marked ISO container systems designed for quick deployment and configured to produce up to 100 m³/h (440 gpm) of water filtered from a variety of influent water sources.

The Mobile EDI systems contain continuous monitoring instrumentation, including: pressure, temperature, flow and water quality, ensuring optimal operation and performance.

Model	Mobile EDI	CEDI
Membrane Modules		
Product Flowrate	25 – 100m ³ /hr 110 – 440 gpm	50m ³ /hr 220 gpm
E-Cell Model	Veolia MK-3X	Ionpure CEDI
Typical Treated Water Results		
Conductivity	<0.1 µS/cm	<0.1 µS/cm
Silica	<20ppb	<20ppb

Additional Information

Model	Mobile EDI	CEDI
Systems on Board		
E-Cells	20x Veolia MK-3X	4x Ionpure CEDI
Operating Configurations	Mode 1 - 20 Stacks, Product up to 100m ³ /hr Mode 2 - 12 Stacks, Product up to 70m ³ /hr Mode 3 - 8 Stacks, Product up to 48m ³ /hr	4 CEDI units, Product up to 50m ³ /hr
Pre-Filter	1 Micron Cartridge Filters	N/A
Feed Pump	22kW Centrifugal	N/A
Onboard CIP/ EDI Waste recycle	2.5m ³ Tank / Pump	N/A
Noise Levels	Up to 79dB	-
Inlet and Outlet Conditions		
Influent Flowrate	Up to 120m ³ /hr (528 gpm)	55m ³ /hr (242 gpm)
Effluent Flowrate	Up to 100m ³ /hr (440 gpm)	50m ³ /hr (220 gpm)
Max Water Temperature	40°C (104°F)	40°C (104°F)
Min Water Temperature	5°C (41°F)	5°C (41°F)
Inlet Pressure	1 bar (15 psig) to 2 bar (30 psig)	2 (30psig) to 6 bar (87 psig)
Max Permeate Outlet Pressure	2.5 bar (36 psig)	4 bar (58 psig)
Inlet Total Hardness	<0.5ppm	<0.5ppm
Inlet Conductivity	<20µS/cm	<40µS/cm
PLC and Instrumentation		
Inlet Instrumentation	Pressure, pH, ORP, Conductivity, Temperature	Flow, Pressure, Conductivity, Temperature
Outlet Instrumentation	Flow, Pressure, Conductivity, Silica	Flow, Pressure, Conductivity, Temperature
PLC	Allen-Bradley	Siemens/Mitsubishi

All information is typical, some unit variation possible.

Installation & Utility Requirements

Model	Mobile EDI	CEDI
Connections		
Connection Type	ANSI 150 Flange	PN10/16 Flange
EDI Feed Water Inlet	6"	DN100
EDI Product Water Outlet	6"	DN100
Concentrate Outlet	N/A ¹	DN32
EDI Waste Recycle Outlet	2"	N/A
Feed By pass/ EDI Rinse out	6"	DN100
RO CIP return/ Tank fill	4"	N/A
Tank Drain/ Overflow	4"	DN100
PSV release	4"	N/A
Electrical Information		
Service	400/460 VAC, 50/60 Hz, 3 Phase	400 VAC, 50Hz, 3 Phase
Current loads	FLA at Mode 1 - 162/152.9A FLA at Mode 2 - 128/119A FLA at Mode 3 - 111/102A	FLA – 83.5A
Connection Type	1x Terminal box, Hard wire 120mm ²	1x Junction box, Hard wire 120mm ²
Container		
Container Size	40ft, Hi Cube	20ft, Hi Cube
Dimensions (l x w x h)	12.2m x 2.4m x 2.9m (40ft x 7.9ft x 9.5ft)	6m x 2.4m x 2.6m (20ft x 7.9ft x 9.5ft)
Gross shipping weight	11,900 kg (26,200 lbs)	5,000 kg (11,000 lbs)
Gross operating weight	15,700 kg (34,600 lbs)	6,000 kg (13,200 lbs)

All information is typical, some unit variation possible.

Notes: ¹Mobile EDI Concentrate is recycled to CIP tank. N/A - Not applicable.

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