

# EDI MODULE INSTRUCTION



We are highly appreciated that you can choose our EDI module. Before using it for production, please take a little time and read the brief instructions.

### Special Notices:

EDI module is the products that working with power supplied, so we hope you can find a professional electrician or engineers operate your EDI System.

1. Checks the wire connection whether fastened and stable
2. When meets any problems, please operate or check it by professional engineers.
3. Forbidden remove the power line when the EDI is working.
4. Do not put any goods and tools on the EDI module.
6. If the EDI System is leaking, please stop the EDI system and check it.

Do not damage the guarantee sticker in case repairing.

Save the paper packing with the equipment in case of needed

# CATALOGUE

## EDI module

1. The product specification
2. EDI Module dimension
3. The treat process diagrams
4. Input water quality standards
5. Connects of the entering and exiting tubes

## EDI electrical equipment (optional)

1. Rectifier power source  
EDI module connections terminal
2. Displayer control

EDI module

water resistivity: 15—18M $\Omega$  .cm

PH: 6.5—7.5

Silica (SiO<sub>2</sub>): 3-20ppm

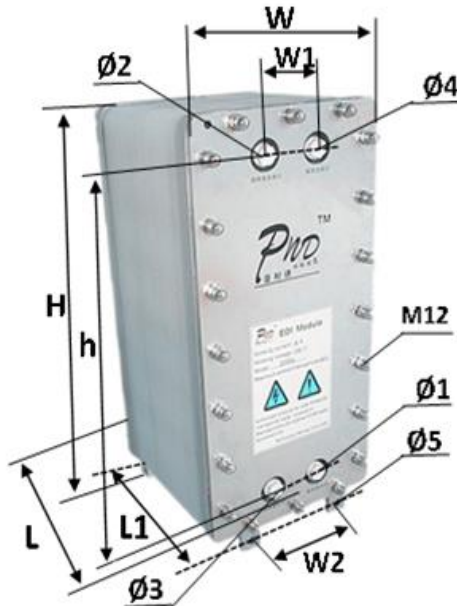
## Specifications

Type	PND-500L	PND-1000L	PND-2000L	PND-3000L
water flow rate (m <sup>3</sup> /h)	0.5	1.0	2.0	3.0
recovery rates (%)	75-85	85-95	90-95	90-95
resistivity (M $\Omega$ .cm)	≥15	≥15	≥15	≥15
Working voltage (VDC)	20-50	30-60	50-100	70-140
Working current (ADC)	4.0	4.0	4.0	4.0
design voltage (VDC)	≤ 200	≤ 200	≤ 200	≤ 200
design current (ADC)	≤ 5.0	≤ 5.0	≤ 5.0	≤ 5.0
Working Pressure (MPa)	0.15-0.4	0.15-0.4	0.15-0.4	0.15-0.4
Maximum pressure (MPa)	0.4	0.4	0.4	0.4
Connection dimensions	DN25	DN25	DN25	DN25
Concentrated/ outlet	DN25	DN25	DN25	DN25

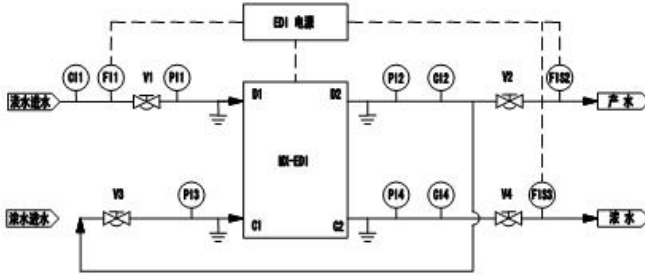
## EDI Module Dimensions

	PND-500L	PND-1000L	PND-2000L	PND-3000L
W	285	285	285	285
H	640	640	640	640
h	640	640	640	640
l1	115	175	235	295
W1	80	80	80	80
W2	160	160	160	160
Φ1	DN25	DN25	DN25	DN25
Φ2	DN25	DN25	DN25	DN25
Φ3	DN25	DN25	DN25	DN25
Φ4	DN25	DN25	DN25	DN25
Φ5	M14	M14	M14	M14
M	M12	M12	M12	M12

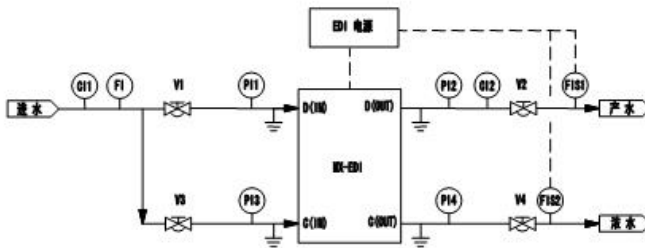
The tolerance of data in above table :  $\pm 05\text{mm}$ , Please check confirm it with us.



## Recommend processing flow chart



(The input water is the output of two-stages Reverse Osmosis Plant)



This our designation as your reference of installation.

Symbol explanations in above chart:

CI 1-----Input water conductivity meter

CI 2-----Output water resistance meter

FI----- Flow rate meter

FIS1-----Output flow meter

FIS2-----Concentration flow meter (flow switch type)

PI 1 -----Inlet pressure gauge

PI 2----- pressure gauge

PI 3-----Concentration water inlet pressure gauge

PI 4-----Concentration discharge pressure gauge

Highly attention to shortage of input water during your designation.

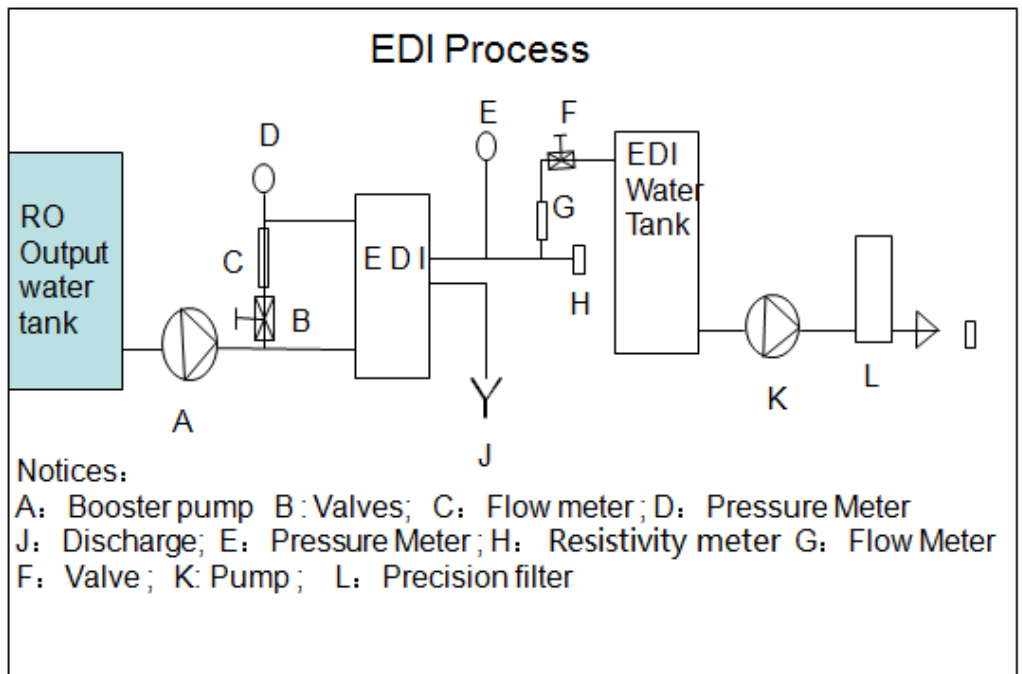
#### 4. Input water quality standards

In order to make sure the best treatment of the EDI System, It's better the input water quality meets the below table :

Raw Water	Output of RO System, the Conductivity $\leq 10 \mu\text{/ cm}$
PH value	6.5—7.5
Temperature	5°C--38°C
Working Pressure	0.15—0.4MPa
Hardness	$\leq 1\text{ppm}$ (Take $\text{CaCO}_3$ as sample test)
organic matter	TOC $< 0.5\text{ppm}$ , it's better none
Oxidant	active chlorine ( $\text{Cl}_2$ ) $< 0.05\text{ppm}$ ; ozone ( $\text{O}_3$ ) $< 0.02\text{ppm}$
Heavy metals	ions $< 0.01\text{ppm}$ (including Fe, Mn)
Silicon	$< 0.5\text{ppm}$ (by $\text{SiO}_2$ )
$\text{CO}_2$	$\text{CO}_2 < 3\text{ppm}$ , if the $\text{CO}_2 > 3\text{ppm}$ , you can use NaOH adjust the PH value
Particle	$\leq 1\mu\text{ m}$

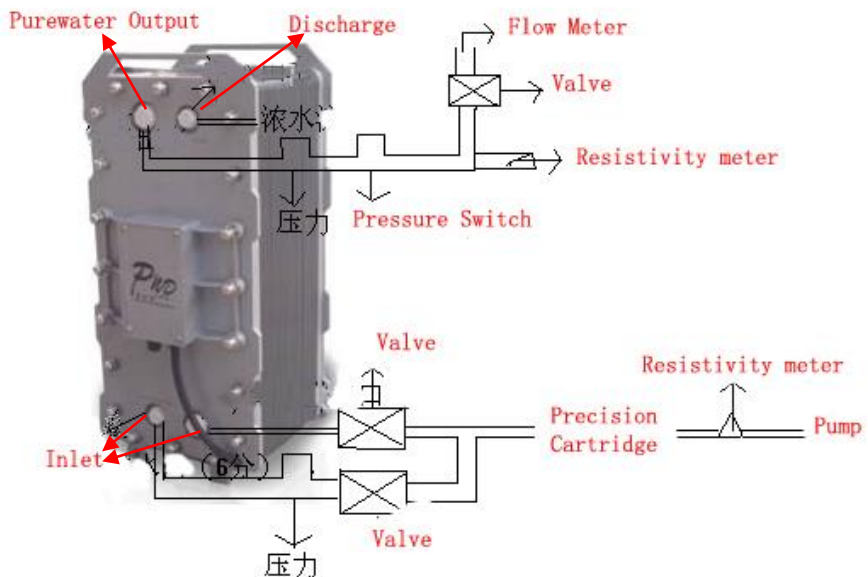
## Flow Chart

### EDI Process



### 5、 Connection of the EDI module

All of our EDI modules, the bottom mouth is inlet, the upper connect is output water , which can't reverse.





## EDI module power control (optional)

brief introduction

PND-((100V-200V)6A is single phase dc voltage constant

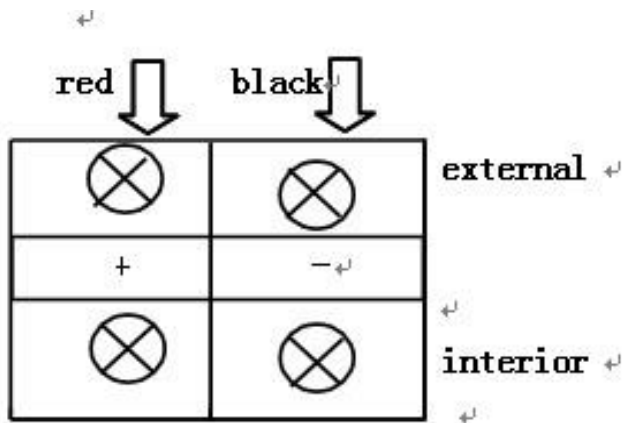
Current power supply, it professional fit for the PND

Some of the parts are from Philips, Thomson brand

And we always make sure the quality good and stabile product working.

### EDI module wire connects:

the conecting line on the left side of EDI module is special for PND-EDI power, the red and black wire is connecting for the post, please make sure the wire should be connected as following chart showed:



### 2.1 Rectificate Power

the DC electrical source is to make the single-phase alternating current tune to Ripple of dc by using the Germany IXYS product. controlled by the connecting wire to show the dc output voltage or current numerical from display.

## 1、 Product feature

advanced switching power supply technology  
Constant pressure, operation is stable and reliable  
Temperature control cooling greatly reduce power consumption  
Power factor can achieve more than 0.95

## 2 、 Running parameter

Frequency: 50 Hz  
Input Voltage: 220V AC  
Output Voltage: 0 - 200 VDC  
Output current: 0—6.5A  
power consumption:  $\leq 8$  W  
Working temperature: 0-45°C

## Specifications:

1. with ultra long purified channel design, makes influent water route bigger, the time of purification longer, effluent water quality stable.
2. With independent seal ring design, It prevents module leaking.
3. No need for washing be able to regenerate.
4. Concentrated water/ Electrolyte water can be recycled, effectively saving use-cost.
5. It's easy to operate and maintenance, and more convenient to use.
6. Components and parts are designed independently, ensure products quality stable.

## Application:

1. Chemical water treatment of power plant
2. Electronics, Semiconductor, Precision Mechanism industries' ultra-pure water
3. Preparation of Foods, Beverage, drinking water
4. Small Purified Water Station, Group drinking water
5. Water for Fine Chemical Industry, Fine tip subjects
6. Preparation of ultra-pure water for other industries
7. Pharmaceutical Industry process water
8. Desalination of sea water and brackish water

Electrodeionization is a water treatment technology that utilizes an electrode to ionize water molecules and separate dissolved ions (impurities) from water. It differs from other water purification technologies in that it is done without the use of chemical treatments and is usually a tertiary treatment to reverse osmosis (RO).

End