

# Smart N

## Introduction

The Smart N system is a compact solution that combines the production of pure water and ultrapure water in a single unit — eliminating the need for a pretreatment stage upstream of the ultrapure water system.

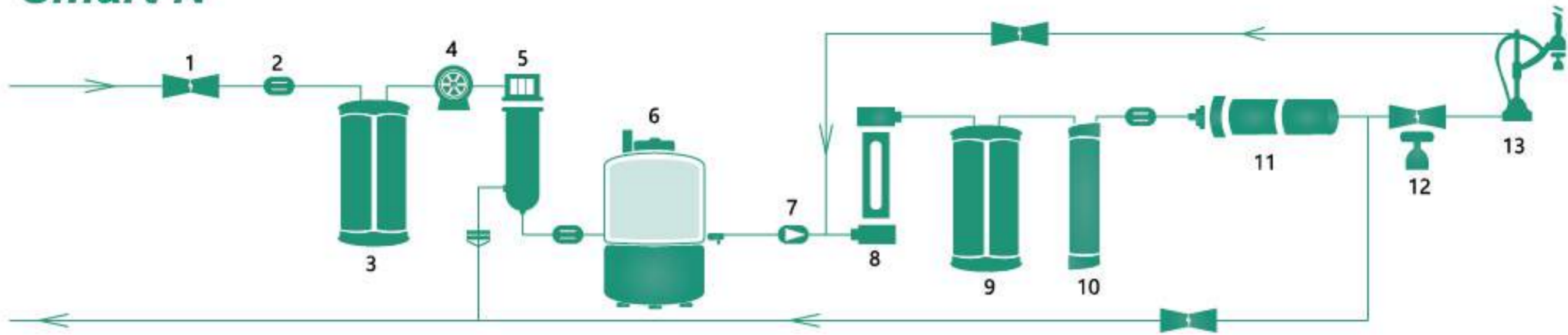


## Configuration

<i>SMART-N System</i>	<b>Smart N15UV</b>	<b>Smart N15VF</b>	<b>Smart N30UV</b>	<b>Smart N30VF</b>
Pretreatment module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High pressure pump	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reverse osmosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dual wavelength UV-lamp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ultra-purification cartridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microfiltration cartridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ultrafiltration cartridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Point-of-use filter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storage tank 30L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air filter net for tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Remote water dispenser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## Smart N



- |                        |                              |                               |
|------------------------|------------------------------|-------------------------------|
| 1 Solenoid Valve       | 6 Water Tank                 | 11 Ultra-Filtration Cartridge |
| 2 Conductivity Sensor  | 7 Ball Valve                 | 12 Point-Of-Use Filter        |
| 3 Pre-treatment Module | 8 Dual Wave UV Cartridge     | 13 Remote Water Dispenser     |
| 4 Boost Pump           | 9 Purification Module        |                               |
| 5 RO Module            | 10 Ultra-Purification Module |                               |

Model	Smart N 15UV	Smart N 15VF	Smart N 30UV	Smart N 30VF
<b>Feed Water Requirement</b>				
Source	Tap water	Tap water	Tap water	Tap water
Conductivity*	<2000us/cm	<2000us/cm	<2000us/cm	<2000us/cm
Hardness**	<450ppm as CaCO <sub>3</sub>	<450ppm as CaCO <sub>3</sub>	<450ppm as CaCO <sub>3</sub>	<450ppm as CaCO <sub>3</sub>
Pressure	0.05~0.5MPa(7-72psi)	0.05~0.5MPa(7-72psi)	0.05~0.5MPa(7-72psi)	0.05~0.5MPa(7-72psi)
Temperature	5~40℃	5~40℃	5~40℃	5~40℃
<b>Purification Water(Class III)</b>				
Ionic Rejection	>95%	>95%	>95%	>95%
Bacteria Rejection	>99%	>99%	>99%	>99%
Conductivity	1~20us/cm(RO-2 5us/cm)	1~20us/cm(RO-2 5us/cm)	1~20us/cm(RO-2 5us/cm)	1~20us/cm(RO-2 5us/cm)
Productivity Rate	15L/h	15L/h	30L/h	30L/h
<b>Ultrapurification Water(Class I)</b>				
Resistivity At 25℃	18.2MΩ.cm	18.2MΩ.cm	18.2MΩ.cm	18.2MΩ.cm
Conductivity At 25℃	0.055us/cm	0.055us/cm	0.055us/cm	0.055us/cm
TOC Level***	1~5ppb	1~5ppb	1~5ppb	1~5ppb
Endotoxin(Pyrogens)****	N/A	<0.001EU/ml	N/A	<0.001EU/ml
Particulate(≥0.02um)	<1pc/ml	<1pc/ml	<1pc/ml	<1pc/ml
Bacteria***	<0.1cfu/ml	<0.1cfu/ml	<0.1cfu/ml	<0.1cfu/ml
Rnase / Dnase**	N/A	Free	N/A	Free
Manual dispense flow rate	1.5~2.0L/min	1.5~2.0L/min	1.5~2.0L/min	1.5~2.0L/min
Automatic dispense volume	100~60000ml	100~60000ml	100~60000ml	100~60000ml
<b>Electrical Requirements</b>				
Electrical Voltage	110V/220V±10%	110V/220V±10%	110V/220V±10%	110V/220V±10%
Electrical Frequency	50HZ/60HZ	50HZ/60HZ	50HZ/60HZ	50HZ/60HZ
<b>Packing Information</b>				
<b>Net Weight</b>				
Main units	24kg	24kg	24kg	24kg
Water tank (30L)	7kg	7kg	7kg	7kg
<b>External Dimensions(W×D×H)</b>				
Main units	315×525×570mm	315×525×570mm	315×525×570mm	315×525×570mm
Water tank (30L)	380×380×595mm	380×380×595mm	380×380×595mm	380×380×595mm
<b>Shipping weight</b>				
Main units	37kg	37kg	37kg	37kg
Water tank (30L)	15kg	15kg	15kg	15kg
<b>Shipping Dimensions(W×D×H)</b>				
Main units	525×610×770mm	525×610×770mm	525×610×770mm	525×610×770mm
Water tank (30L)	520×440×615mm	520×440×615mm	520×440×615mm	520×440×615mm

\* If feed water quality is poor(Conductivity>1000us/cm), strengthened pretreatment module and RO-2 type is highly recommended

\*\* When hardness of feed water is high(>450ppm as CaCO<sub>3</sub>), 0.5T water soften is recommended

\*\*\* Dual wave UV module need to be adopted. Also dependent on feed water, recommended feed TOC<30ppb

\*\*\*\*Ultra-filtration module need to be adopted. Feed water need to be satisfied as above