

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.

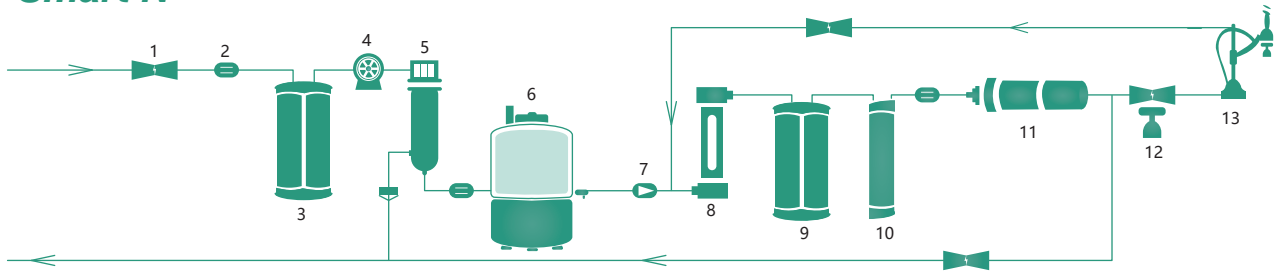


Configuration

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



Smart N



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|------------------------|------------------------------|-------------------------------|
| 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
Feed Water Requirement				
Source	Tap water	Tap water	Tap water	Tap water
Conductivity*	< 2000us/cm	< 2000us/cm	< 2000us/cm	< 2000us/cm
Hardness**	< 450ppm as CaCO ₃	< 450ppm as CaCO ₃	< 450ppm as CaCO ₃	< 450ppm as CaCO ₃
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 °C	5~40 °C	5~40 °C	5~40 °C
Purification Water(Class III)				
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
Ultrapurification Water(Class I)				
Resistivity At 25 °C	18.2MΩ.cm	18.2MΩ.cm	18.2MΩ.cm	18.2MΩ.cm
Conductivity At 25 °C	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
Electrical Requirements				
Electrical Voltage	110V/220V±10%	110V/220V±10%	110V/220V±10%	110V/220V±10%
Electrical Frequency	50HZ/60HZ	50HZ/60HZ	50HZ/60HZ	50HZ/60HZ
Packing Information				
Net Weight				
Main units	24kg	24kg	24kg	24kg
Water tank (30L)	7kg	7kg	7kg	7kg
External Dimensions(W×D×H)				
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
Shipping weight				
Main units	37kg	37kg	37kg	37kg
Water tank (30L)	15kg	15kg	15kg	15kg
Shipping Dimensions(W×D×H)				
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 CaCO₃), 0.5T water softening 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