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.

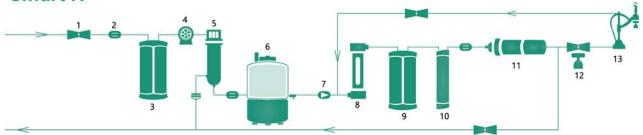


Configuration

SMART-N System	Smart N15UV	Smart N15VF	Smart N30UV	Smart N30VF
Pretreatment module	0	0	0	0
High pressure pump	0	0	0	0
Reverse osmosis	0	0	0	0
Dual wavelength UV-lamp	0	0	0	0
Ultra-purification cartridge	0	0	0	0
Microfiltration cartridge	0	1	0	\
Ultrafiltration cartridge	1	0	\	0
Point-of-use filter	0	0	0	0
Storage tank 30L	0	0	0	0
Air filter net for tank	0	0	0	0
Remote water dispenser	0	0	0	0



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
Feed Water Requirement				
Source	Tap water	Tap water	Tap water	Tap water
Conductivity*	<2000us/cm	<2000us/cm	<2000us/cm	<2000us/cm
Hardness**	<450ppm as CaCO3	<450ppm as CaCO3	<450ppm as CaCO3	<450ppm as CaCO3
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 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