

# — Nova-Smart



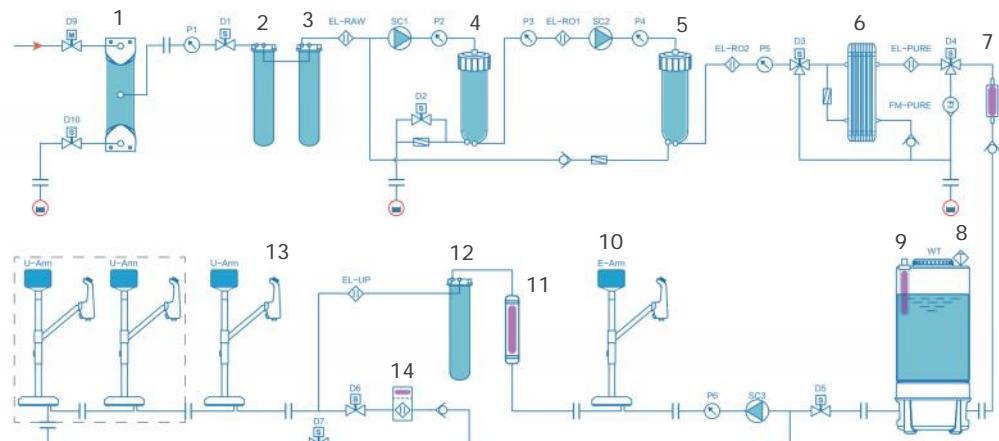
## Nova EU10 / Nova EU15 / Nova EU20

### Unique features

All-in-one system

- All-in-one system for ASTM Type I & Type II water/Clinical laboratory reagent water (CLSI)
- Real on-line TOC analyzer with 185nm UV-lamp inside
- EDI module imported
- Dual wavelength UV lamp 254nm & 185nm, Pure water UV lamp 265nm
- Two (Type I & Type II) remote water dispenser arms with touch screen display
- U-cloud platform for remote monitoring (Wifi module)
- USB access port for data logging

### Water Flow Chart



- |                             |                                 |                                  |
|-----------------------------|---------------------------------|----------------------------------|
| 1. Pre-treatment module     | 6. EDI module                   | 11. UV lamp 185 & 254 nm         |
| 2. Pre-guard cartridge A    | 7. Pure water UV lamp 265nm     | 12. Ultra purification cartridge |
| 3. Pre-guard cartridge B    | 8. Water tank air filter        | 13. Type I water dispenser arm   |
| 4. First stage RO membrane  | 9. Water tank UV lamp 254nm     | 14. On-line TOC analyzer         |
| 5. Second stage RO membrane | 10. Type II water dispenser arm |                                  |



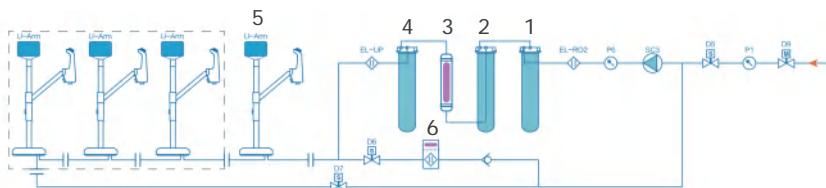
## Nova U

### Unique features

- ASTM Type I Ultra purified water system
- Real on-line TOC analyzer with 185nm UV-lamp inside
- Dual wavelength UV-lamp 254nm & 185nm
- One Type I remote water dispenser arm with touch screen display
- U-cloud platform for remote monitoring (Wifi module)
- USB access port for data logging

ASTM Type I Ultra purified water system

### Water Flow Chart



1. Pre purification cartridge A
2. Pre purification cartridge B
3. UV lamp 185 & 254 nm
4. Ultra purification cartridge
5. Type I water dispenser arm
6. On-line TOC analyzer

Main configurations	All-in-one system			Type II water			Type I water
	Nova EU10	Nova EU15	Nova EU20	Nova E10	Nova E15	Nova E20	Nova U
Pre-treatment module	YES			YES			NO
Main host	YES			YES			YES
Pre-guard cartridge A	YES			YES			NO
Pre-guard cartridge B	YES			YES			NO
Ultra purification cartridge B*	YES			NO			YES
Two-stage Reverse osmosis	YES			YES			NO
EDI module imported	YES			YES			NO
Pre purification cartridge A	NO			NO			YES
Pre purification cartridge B	NO			NO			YES
Dual wavelength (254nm & 185nm) UV-lamp	YES			NO			YES
Pure water UV lamp (265nm)	YES			YES			NO
Real on-line TOC analyzer	YES			NO			YES
Type I Remote water dispenser arm with touch screen display	YES			NO			YES
Type II Remote water dispenser arm with touch screen display	YES			YES			NO
2M water piping from main unit to water tank & water dispenser	YES			YES			YES
Water tank of Type II water, stepless water level sensor	YES			YES			NO
254nm UV light of water tank	YES			YES			NO
Inlet air filter of water tank 0.2μm	YES			YES			NO
Water leakage protection sensor	YES			YES			YES
0.22 μm end filter	YES			YES			YES

\*Optional ultra purification cartridge A special for semiconductor industry that has higher deionization requirements



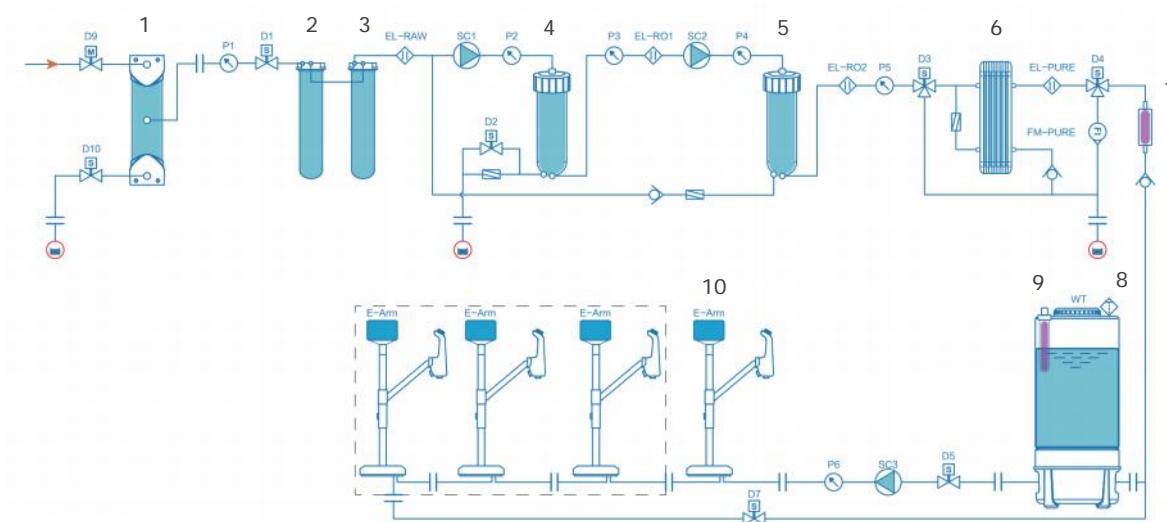
## Nova E10 / Nova E15 / Nova E20

ASTM Type II Ultra purified water system

### Unique features

- ASTM Type II Ultra purified water system
- EDI module imported
- Pure water UV lamp 265nm
- Type II remote water dispenser arm with touch screen display
- U-cloud platform for remote monitoring (Wifi module)
- USB access port for data logging

### Water Flow Chart



1. Pre-treatment module
2. Pre-guard cartridge A
3. Pre-guard cartridge B
4. First stage RO membrane
5. Second stage RO membrane

6. EDI module
7. Pure water UV lamp 265nm
8. Water tank air filter
9. Water tank UV lamp 254nm
10. Type II water dispenser arm

Model	All-in-one system			Type II water			Type I water		
	Nova EU10	Nova EU15	Nova EU20	Nova E10	Nova E15	Nova E20	Nova U		
Feed water requirements	Potable tap water					Type II water/RO			
Source	<2000µS/cm					<100µS/cm			
Conductivity	<1ppm					<50ppb			
TOC	<300ppm					0-1ppm			
Hardness*	0.1~0.4MPa					0.1~0.4MPa			
Pressure	4~45 °C					4~45 °C			
Temperature	5-9					7/6-8			
pH	<3ppm					/			
Total chlorine	<2ppm					/			
Residual chlorine	<30ppm					/			
SiO <sub>2</sub>									
Type II high purified water									
Resistivity at 25 °C **	15MΩ.cm; typically 10-15MΩ.cm					N/A			
Conductivity at 25 °C **	0.067µS/cm; typically 0.1µS/cm								
TOC	<30ppb(µg/L)								
Particulates with size > 0.22µm***	No particles								
Bacteria***	<0.01cfu/mL (<10cfu/L)								
RO rejection	≥99%								
EDI ion rejection	≥99%								
Production flow rate	10L/H	15L/H	20L/H	10L/H	15L/H	20L/H			
Manual control water flow rate	Maximum 2L/min, stepless control of flow rate								
Quantitative water dispense range	0.01L ~ 60L								
Type I ultra purified water									
Resistivity at 25 °C	18.2MΩ.cm					N/A			
Conductivity at 25 °C	0.055µS/cm								
TOC	≤2ppb(µg/L)								
Particulates with size > 0.22µm ***	No particles								
Endotoxin (Pyrogens)***	<0.001EU/mL								
Bacteria ***	<0.01cfu/mL (<10cfu/L)								
Rnase/Dnase ***	—								
Proteases ***	<0.15µg/mL								
Manual control water flow rate	Maximum 2L/min, stepless control of flow rate								
Quantitative water dispense range	0.01L ~ 60L								
Electrical requirement									
Electrical voltage	110V/220V ±10%								
Electrical frequency	50Hz/60Hz								
Power	<135W								
Size information									
Net Weight									
Pre-treatment module	5.9kg						N/A		
Main host	24.9kg	25.4kg	26.6kg	23.9kg	24.4kg	25.6kg	14.3kg		
Water dispenser arm	4.1kg/unit								
30L Water tank	10.6kg						N/A		
60L Water tank	12.2kg								
100L Water tank	13.6kg								
External Dimension (WxDxH)									
Pre-treatment module	180×215×430 (mm)						N/A		
Main host	330×545×525 (mm)						330×420×525 (mm)		
Water dispenser arm	204×330×714 (mm)/unit								
30L Water tank	410×410×695(mm)								
60L Water tank	410×410×935(mm)								
100L Water tank	410×410×1245(mm)								
Packing information									
Gross Weight									
Accessory	13kg						N/A		
Main host	33kg						24kg		
Water dispenser arm	7.5kg/unit								
30L Water tank	12.5kg						N/A		
60L Water tank	15.1kg								
100L Water tank	16kg								
Packing Dimension (WxDxH)									
Accessory	400×780×280 (mm)						N/A		
Main host	420×630×700 (mm)						420×630×790 (mm)		
Water dispenser arm	400×780×280 (mm)/unit								
30L Water tank	420×420×770 (mm)						N/A		
60L Water tank	420×420×1010 (mm)								
100L Water tank	420×420×1320 (mm)								

\*If the tap water contains a high rate of calcium ions and magnesium ion which do not meet the requirement, please use salty box to remove part of calcium ions and magnesium ion in advance

\*\*Resistivity typically 10-15MΩ.cm at 25 °C, Conductivity typically 0.1µS/cm, at 25 °C

\*\*\*Feed water quality should meet above requirements and purified water through the remote water dispenser with end filter