

## DUO Water Purification System

The DUO system is a dual system consisting of a RO system and an UP system. It can produce pure water (RO) and ultra pure water (UP).

### Features

- Input water quality check
- Automated self check
- Easy connection
- Easy maintenance
- Pretreatment filters
- Alarm and notice function
- Easy cartridge (RO Pack & UP Pack) replacement
- Easy to use and takes up very little space
- Economical and efficient
- Low noise level

### Functions

- Water level detection
- Automatic self test during working
- Real time water quality check (RO, UP)
- Easy to switch between RO and UP
- Automated RO membrane washing
- Automated alarm for filter replacement
- Filter life time “%” notice
- Real time temperature check
- Real time UV lamp check
- Real time input water pressure check



Output Water Purity:  
 RO: 0 ~ 20  $\mu\text{s}/\text{cm}$   
 UP: 18.3 ~ 10.0  $\text{m}\Omega \cdot \text{cm}$

### Application

RO: Chemical, washing water, aseptic experiment, process water

UP: Analytical instruments, HPLC, LC/MS, GC/MS, AAS, ICP, life science and semi-conductive lab

### Application for Abbota Water Purification Systems

| Type                   | Basic | UV | UF | COMBO |
|------------------------|-------|----|----|-------|
| Analytical Instruments | ○     | ○  | ○  | ○     |
| AAS, ICP/MS            | ○     | ○  |    | ○     |
| HPLC, GC, TOC          | ○     | ○  |    | ○     |
| Organic analysis       |       | ○  |    | ○     |
| Cell & tissue culture  |       |    | ○  | ○     |
| In vitro fertilization |       |    | ○  | ○     |
| Electrophoresis        |       |    | ○  | ○     |
| RNase, DNase & DNA     |       |    |    | ○     |
| Molecular Biology      |       |    |    | ○     |



## Specifications

| Models                                    | ULTIMA DUO 200   | ULTIMA DUO 300        | LAB DUO 200  | LAB DUO 300           |
|---|--|-----------------------|--|-----------------------|
| Product Rate                              | Max. 15L/Hr  | Max. 25L/Hr           | Max. 15L/Hr  | Max. 25L/Hr           |
| Quality Display                           | Input Water : 0~600 $\mu\text{s}/\text{cm}$<br>Pure Water(RO) : 0~200 $\mu\text{s}/\text{cm}$<br>Ultra pure(UP) : 0~18.3 $\text{M}\Omega\cdot\text{cm}$<br>Temperature : 0~50 $^{\circ}\text{C}$ |                       | Pure Water(RO) : 0~200 $\mu\text{s}/\text{cm}$<br>Ultra pure(UP) : 0~18.3 $\text{M}\Omega\cdot\text{cm}$ |                       |
| Controller                                | Microprocessor   |                       |  |                       |
| Display                                   | 16 x 2 Line backlight LCD Display  |                       |  |                       |
| Key                                       | 4 Buttons  |                       | 3 Buttons  |                       |
| Standard Filter                           | 10" Pre filter, 10" A/C filter, ULTi RO Pack, ULTi UP Pack, 0.22 $\mu\text{m}$ Final Filter  |                       |  |                       |
| Product Quality (RO)                      | Rejection Ratio<br>+1/-1 ion: 95~99%      ion(+2~+4/-2~-4): 98~99%      Organism: 99%<br>Micro organism: 99%      Particle: 99%      Pyrogen: 99%  |                       |  |                       |
| Type (UP)                                 | Basic  | UV                    | UF   | COMBO                 |
| 0.22 $\mu\text{m}$ Final Filter           | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> |
| 254/185nm UV Lamp                         |  | <input type="radio"/> |  | <input type="radio"/> |
| UF Filter                                 |  |                       | <input type="radio"/>  | <input type="radio"/> |
| Product Quality (UP) TOC                  | 5 - 10 ppb   | 0 - 5 ppb             | 5 - 10 ppb   | 0 - 5 ppb             |
| Endotoxin (Eu/ml)                         | -  | -                     | <0.001   | <0.001                |
| Bacteria (cfu/ml)                         | <1   | <1                    | <1   | <1                    |
| Particles (0.22 $\mu\text{s}/\text{ml}$ ) | <1   | <1                    | <1   | <1                    |
| Basic accessories                         | Level sensor, Manual, Power cord, Hand level, Tube   |                       |  |                       |
| Dimensions (W x D x H)                    | 380 x 480 x 500 mm   |                       |  |                       |
| Power                                     | 230Vac, 50/60Hz, 100W(Max)   |                       |  |                       |

