## COMPACT- THE SYSTEM FOR CENTRAL LABORATORY SYSTEMS







# CENTRAL LABORATORY SUPPLY FROM 24-500 LTR./H WITH OSMOSIS AND OPTIONAL EDI

We have designed the laboratory systems for higher consumption but under the premise of a compact design as a cabinet system. Our basic model with integrated tank module and pressure pump already starts at a size of W  $600 \times D$   $520 \times H$  1,350 mm.

With our Berrytec compact class, you can also supply your laboratory water over several floors with a ring line, recirculation and UV disinfection in a modular cabinet design. Osmosis alone or with downstream EDI. We can customize your individual system. Also in this model size we build again in robust metal housings, designed for a long service life.

The compact class provides you with water classes Type II + Type III

### WATER STANDARDS ACCORDING TO STANDARDS ASTM D1193-91

measure- ment		conductivity	MΩ at 25°C	salinity	TOC	
	Tap water	400-1500 μS/cm		ca. 300 ppm	bis 5000 µg/Ltr.	)
	ASTM Typ I ISO D1193-6	0,055 μS/cm	> 18	0,05 ppm	<50 μg/Ltr.	
	ASTM Typ II	1 μS/cm	>1	0,12 ppm	<50 μg/Ltr.	)
	ASTM Typ III	0,25 μS/cm	> 4	8 ppm	<200 µg/Ltr.	
	ASTM Typ IV	5,0 μS/cm	> 0,2	- *	-	

### OUR PASSION IS THE BEST RECIPE FOR QUALITY







### **INNOVATIVE PRODUCTS**

Berrytec water systems are equipped with functional technology to control your water quality.

We work with modern processing methods such as electrodeionization, osmosis with pulsation technology and proven polisher and subsequent cleaning cartridge.

Our systems are so flexible and diverse that you only buy what is necessary for your application.

The housings of our Berrytec series are built from magnesium-aluminum alloys, as well as our dispenser arm. This allows us to guarantee optimum service life and durability.

### **CONCEPTIONAL**

Not your laboratory needs to adapt to your water system, but we adapt your system to your standards.

In other words, we offer many solutions as individual components. As well as compact solutions as a cabinet system or as solutions in a fixed or mobile base cabinet.

With our dispenser-arm solutions you are flexible when you have to fill your vessels.

Different water qualities from one system are possible, that is efficient and saves costs.

Your requirements in the laboratory are changing: no problem, we can retrofit our Berrytec series on many models.

### **ADVICE AND SERVICE**

With the right choice of your water system we will not leave you in the dark. We analyze the best system for your application for free.

We take the following parameters into account:

- feed water quality
- Your laboratory application
- · water demand
- Financial framework
- Variants

Request the free test kit from us or one of our distributors. Fill in the questionnaire and send back the enclosed sample tube with your feed water.

Maintenance, such as changing subsequent cleaning cartridges, UV lamps and filters, is customer-friendly and can be done by the user. This saves costs.

Ask us, we help you to choose the right system.

Pre-Softening To increase the service life of your osmosis modules
Membrane degassing For the reduction of carbon dioxide in the water, for example to reduce the conductance of the produced permeate
Reverse Osmosis The cost-effective method of producing laboratory water. Up to 98% deposition
<b>Electrodeonization</b> Recleaning stage after osmosis to produce water of less than 1 $\mu$ S / cm
Ultrapure water The royal class of water quality
UV radiation Against standstill contamination
Ultrafiltration Removal of pyrogens and DNA
Ion exchanger Removal of inorganic ions

**Adsorption**Activated carbon can be used to remove dissolved organic substances and chlorine

### MODEL OVERVIEW OF ALL SYSTEMS

Series	Production volume per hour	Adsorption and Deioni- zation	Osmosis	EDI	Ultrapure water	UV	UF	Post- cleaning			
Available options											
mini-RO	up to 24 ltr.		•								
mini-UP+	up to 20 ltr.	•			•	•	•				
RO	up to 60 ltr.	•				•		•			
EDI	up to 20 ltr.	•	•	•		•					
UP	up to 20 ltr.	•			•	•	•				
Kombi Klasse	from 5-20 ltr.	•	•	•	•	•	•	•			
Sutower	up to 36 ltr.	•			•		•				
Kompakt²	from 24 ltr. up to 500 ltr.			•			•				

<sup>&</sup>lt;sup>2</sup> cabinet / cabinet model, also available as roll container

### THE NEW COMPACT CLASS

The combi class is our answer to your laboratory and industrial needs, up to a facility supply by means of a recirculating ring line for volumes from 24 litres up to 500 litres of pure water in classes II and/or III. While the systems up to 36 litres can still be managed with a housing size of 570 x 500 x 640mm without a tank module, the systems from 100 litres per hour already require a housing dimension of 800 x 800mm, which is particularly required if an EDI cell is used and was installed in it downstream. But even here we still have enough space to install a booster pump or a tank module of 300 litres. Thus we are also always flexibly adjusted to your requirements with our combi class.

The KKRO or KKEDI models are available in many gradations and are adapted to your tailor-made requirements. In principle, however, the larger the volume, the larger the modules, if necessary with a downstream electrodeionization unit where you would need more space for that. About a separate sensor-motor pump control it is then quite comfortably possible via an external ring line to recirculate the provided pure water from the tank and, if required, to retrieve it at the points of extraction. In doing so, the pump will reduce the line pressure during the readjust withdrawal. Of course, all options are available on a large scale, including tank ventilation filters with CO2 absorber, UV disinfection in the ring line, sterile filters and TOC online measurement. Here our motto applies, robust construction and quality, designed for a long service life. However, due to the high volume of these systems, we cannot avoid using a pre-softening solution as a one- or two-stage solution, as otherwise the service life of your membranes would only be weeks.



### COMPACT, POWERFUL, COST-EFFECTIVE!

Our model range is wide, the KKRO is available in 24/36/50/10/200/300/400 and 500 litres.

The KKEDI with downstream electrodeionisation unit is available in 30, 50, 80, 100, 200, 300, 400 and 500 litre versions. Thus, daily quantities of up to 6000 litres can be handled.

- 2 internal prefilter cartridges 2 x 10" or 20" 1µm and activated carbon with 5µm
- special internal iron filter (option)
- the rinsing program and the discharge control for the permeate with our patented pulsation control is unique and extends the membrane service life!
- Concentrate to permeate ratio 27-35: 73-65
- TOC values <30ppb</li>
- TOC online measurement in real time 1.2-200ppb (option)
- Removal of silicates <99.9%</li>
- · Optional control integrated in housing or external, e.g. Media column possible in your laboratory or in a control room
- Control: Touch Panel (Option)
- Network module (option)
- · IQ/OQ
- Integrated pre-cleaning cartridge for the EDI cell
- Sanitation module (option)
- Powerful internal or external feed pump with output volume tailored to your needs

The tank is freely selectable in practically all sizes, up to a volume of 5000 litres.

At this point, a precise and detailed needs analysis and project planning is required. Our team is at your disposal at any time with on-site appointments and will be happy to advise you.

UNIQUE: THE BERRYTEC COM-PACT IS THE ONLY WATER SYSTEM THAT CAN BE INSTALLED TAI-LOR-MADE DIRECTLY INTO YOUR LABORATORY CABINETS.



### Berrytee®

Berrytec GmbH Schwablweg 15 85630 Harthausen www.berrytec.eu Germany

kontakt@berrytec.eu Tel: +49 8106/3790-22