

# CDRBeerLab®

Analysis system  
for beer quality  
control



## CDR BeerLab® system

CDR BeerLab® consists of a thermostatically controlled analyser with photometric technology using LED emitters and kits of reagents that are pre-filled into vials and ready to use.



1

### Take the sample

to be analysed using the pipettes supplied with the system.



2

### Place the sample

in the test tube containing the pre-filled reagent.



3

### Insert the test tube

into the reading cell to obtain the analysis result.



## Reduced analysis times

With CDR BeerLab® you are finally free to carry out the analyses independently, in your own brewery, quickly and easily, without having to rely on an external laboratory. In fact, it is possible to analyse **16 samples simultaneously** and constantly monitor the production process, obtaining specific and precise answers in a few minutes.



## Easy to use

The system has been designed so that it can be used **not only in the laboratory, but also on the production line for real-time results**, by personnel without specific technical training.

**The analysis methods, shown on the display, are simpler than traditional methods and can be performed in just a few steps.**

If required, the HELP function will guide the operator step by step through the procedure. The result is automatically calculated, displayed and printed out.



## Reliable

CDR BeerLab® **guarantees high sensitivity, a wide measuring range and excellent repeatability** of the results thanks to the innovative photometric technology using LED light sources and fixed wavelengths ranging from the ultraviolet to the visible spectrum (with a range of 0 to 6 optical density). **The analysis results are correlated with those of the reference methods.**

Pre-filled and disposable reagents are packaged in bags of 10 tests, developed and produced by the CDR research laboratories.



Beer	TEST	Measuring range	Resolution	Repeatability	Test time
	Sugars (GFMS) <small>Fermentable sugars in wort (glucose, fructose, maltose, sucrose, maltotriose)</small>	15.0-200.0 g/L	0.1 g/L	1.6 g/L	13 mins
	Sugars (GFM) <small>Fermentable sugars in beer and wort (glucose, fructose, maltose, maltotriose)</small>	0.1-18.0 g/L	0.1 g/L	0.2 g/L	6 mins
		15-200 g/L	1 g/L	2 g/L	6 mins
	Lactic acid D+L	150-3500 ppm	1 ppm	73 ppm	10 mins
	Bitterness	6.0-50.0 IBU	0.1 IBU	0.7 IBU	6 mins
	Colour	EBC 1-100 SRM 0.5-50.0	EBC 1 SRM 0.1	EBC 1 SRM 0.3	1 min
	Alcohol content	0.002-0.200% vol	0.001% vol	0.002% vol	11 mins
	Alcohol content	0.10-1.00% vol	0.01% vol	0.01% vol	11 mins
	Alcohol content	1.0-17.0% vol	0.1% vol	0.2% vol	11 mins
	VDKs	0.05 - 2.00 mg/L	0.01 mg/L	0.06 mg/L	5 mins + distillation time
	Yeast Vitality	0.5 - 2.6 AP	0.1 AP	0.1 AP	25 mins
	Acetic acid	20 - 220 mg/L	1 mg/L	11 mg/L	6 mins
	pH	3.60-6.00	0.01	0.02	1 min
	Calcium	20.0-150.0 ppm	0.1 ppm	3.4 ppm	8 mins
	Starch	0.10-5.00 g/L	0.01 g/L	0.07 g/L	1 min
Carbohydrates	2.0 - 80.0 g/L	0.1 g/L	0.6 g/L	13 mins	
FAN <small>Free Amino Nitrogen by OPA</small>	30 - 300 mg/L	1 mg/L	15 mg/L	4 mins	
Total SO <sub>2</sub>	1.0-30.0 ppm	0.1 ppm	0.7 ppm	2 mins	
Polyphenols	50-450 mg/L	1 mg/L	16 mg/L	5 mins	
Zinc	0.10-1.00 mg/L	0.01 mg/L	0.02 mg/L	6 mins	
	0.90-10.00 mg/L	0.01 mg/L	0.16 mg/L		

In just 15 minutes, up to 16 samples can be analysed with CDR BeerLab® and up to 3 samples with the Junior model.

Water	TEST	Measuring range	Resolution	Repeatability	Test time
	Calcium	20.0-250.0 ppm	0.1 ppm	4 ppm	1 min
	Magnesium	2.0 - 50.0 ppm	0.1 ppm	1 ppm	1 min
	Bicarbonates	1 - 300 ppm	1 ppm	3 ppm	10 mins
	Chlorides	15 - 500 ppm	1 ppm	21 ppm	1 min
	Potassium	5 - 500 ppm	1 ppm	6 ppm	1 min
	Sulfates	10 - 250 ppm	1 ppm	7 ppm	1 min
	Zinc	0.05 - 1.00 ppm	0.01 ppm	0.03 ppm	2 mins
	Alkalinity	5 - 600 mg/L	1 mg/L	12 mg/L	10 mins

# CDRBeerLab®



# CDRBeerLab® Jr



<b>Analyses</b>	Complete analysis panel	Customisable configuration
<b>Samples that can be analysed simultaneously</b>	16	3
<b>Multitasking Mode</b>	Yes	No
<b>Calibration</b>	Pre-calibrated No periodic calibration is necessary	Pre-calibrated No periodic calibration is necessary
<b>Maintenance costs</b>	No	No
<b>Storage of results</b>	Sufficient internal memory for storing thousands of analysis results in CVS and XML files compatible with all database formats (e.g., XLS, SQL)	Sufficient internal memory for storing thousands of analysis results in CVS and XML files compatible with all database formats (e.g., XLS, SQL)
<b>Photometric module</b>	Up to 6 wavelengths in 4 reading cells	Up to 6 wavelengths in 4 reading cells
<b>Incubation module</b>	37 ° C thermostated block with 16 positions	37°C thermostated reading block with 3 positions with incubation function
<b>Connection with barcode and QR code scanners</b>	Yes, via Bluetooth	No
<b>Display</b>	5.7" TFT colour LCD with touch screen	4.3" TFT colour LCD with touch screen
<b>Connectivity</b>	1 USB port type B for transferring the performed analysis database, configuration and software update, PC connection 1 USB port type A for technical service and computer connection 1 Ethernet port (LAN) for connection to intranet Bluetooth 4.0	1 USB port type B for transferring the performed analysis database, configuration and software update, PC connection  Bluetooth 2.1
<b>Printer</b>	80 mm wide printer with integrated graphics	Wireless connection for external printer
<b>Dimensions and weight</b>	32 x 29.5 x 13 cm (W x D x H) 2.80 kg	15 x 22 x 8,3 cm (W x D x H) 0,80 Kg
<b>Power supply</b>	24 V	24 V or optional lithium-ion battery

rev. 7.1

## CDRBeerLab®

CDR BeerLab®, system of **FOODLAB®** line, is a trademark of CDR S.r.l.  
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