



# 1-CUBE s. r. o.

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## PASTEURIZATION MONITOR - PMKL

### Technical description:

Our pasteurization monitor is used for recording temperature curves as well as for measuring of the pasteurization effect on the product. The device can be used as a recording instrument for the measurement of other arbitrary temperatures (for example, during mashing, primary fermentation, secondary fermentation, temperature in storage rooms etc.).

The device consists of two temperature probes and a measuring microcomputer. The first probe measures the temperature inside the bottle. The other checks the temperature of the sprinkling water. The measuring microcomputer is housed in a waterproof box. The length of the temperature probe should be approximately 10-30 mm from the bottom of the bottle or can (as this heats up slowest). Temperature probes are custom made for your specific application. The pasteurization monitor is equipped with an internal memory and the measured temperatures are recorded in this unit. This data is read from the internal memory of the pasteurization monitor, via a connecting cable (RS232 or USB), into a PC (computer). The measured values can then be evaluated. The pasteurization monitor is powered by a battery, which has a life of approximately 2 years. (Replacement batteries are available). To turn the monitor on and off is very easy - just touch the monitor with a magnet.





**New version of PMKL with displayed temperatures**

### **The Software Options and Advantages:**

- Support of operating systems WINDOWS 98, 2000, ME, XP, Vista
- Transfer of data from the pasteurization monitor into a PC
- Graphic representation of temperature and pasteurization curves
- Graphic representation of a curve reflecting the rate of death of microorganisms
- Calculation of total pasteurization units
- Calculation of instantaneous values of total microbiological death
- Calculation of instantaneous value of total relative decrease of the number of microorganisms
- Calculation of the fraction of sensoric damage of beer by pasteurization
- Tabular extract of measured values
- Print out of temperature curve, pasteurization curve and tabular values by printer
- Results of measured values on computer disc
- Repeated reading of data on a computer disc which is represented on computer display (with possibility of print out)

### **Technical data**

Range of pasteurization units.....	0 - 1000 PJ
Range of temperatures.....	- 15 to + 80 ° C
Calculation of PU.....	1 PU /min at 60 ° C
Z ( culture of other yeast).....	6,94 ° C
Accuracy of temperature measurement.....	+/- 0,1 ° C
Accuracy PU.....	0,5 PU
Period of temperature measurement.....	set value is 10 sec
Possibility of change in range from	5 sec to 24 hours
Power source.....	battery
Lithium battery life is approximately	two years.