

4.13. CONDUCTIVITY METER WM-2000

It is intended for automatic measurement of the mass fraction of ash of 28% solutions of pure sugar in accordance with DSTU2317-93 (ДСТУ2317-93) and 5% solutions of raw sugar according to ICUMSA methodology.

It can also be used to measure the specific electrical conductivity and temperature of current conductive liquids.

High metrological and consumer characteristics are achieved due to the original technical solutions incorporated in the device design and conductometric cell.

Conductivity meter WM - 2000 differs by:

- high impact housing of the sensor;
- moisture-proof housing;
- possibility of an ideal washing of the sensor;
- absence of influence of near-electrode processes on the measurement result;
- high temporal stability;
- taking into account the quality of distillate;
- the mode of recording an arbitrary sensor constant in non-volatile RAM.



Technical specifications:

Measuring ranges:		Measurement error:	
- mass fraction of ash in sugar, %	0,001 ... 1	- mass fraction of ash in sugar, %	$\pm(3,0+0,01/X_{\text{ВИМ}})^*$
- specific electrical conductivity, $\mu\text{Sm} / \text{cm}$	0,1 ... 7000	- specific electrical conductivity, %, in the ranges:	
Sensor constant, cm^{-1}	$0,7 \pm 0,1$	• 0,1 ... 700, $\mu\text{Sm} / \text{cm}$	$\pm(2,0+30/G_{\text{ВИМ}})^*$
Dimensions, mm	200x100x110	• 700 ... 7000, $\mu\text{Sm} / \text{cm}$	± 2
Power consumption, VA	3	- temperature of the analyzed medium, °C	$\pm(3 \times 10^{-5} t_{\text{ВИМ}} + 0,2)^*$
Supply - alternating current network $220 \pm 22\text{V}$, $50 \pm 1\text{Hz}$.		* - $X_{\text{ВИМ}}$, $G_{\text{ВИМ}}$, $t_{\text{ВИМ}}$ - the measured values of the mass fraction of ash, and specific electrical conductivity and temperature, respectively.	