

SYD-421 Insulating Oils Volumetric Resistivity Tester



Summary

The instrument is a new instrument specially developed for resistivity determination using the active bridge principle as per the Industry Standard of People's Republic of China DL/T421-91 "Test Methods for Volume Resistivity of Insulating Oils".

I. Main technical features

1. The instrument is composed of parameters measurement system and oil cup heating control system. Its measurement range is $10^7 \sim 19.99 \times 10^{13} \Omega \cdot \text{cm}$. It can time, read readings and save test data automatically.
2. It has characteristics of simple structure, excellent linearity, high sensitivity, stability, and safety. It is better than the instrument using voltage and current method.
3. Excepting to determine the volume resistivity of insulating oils, it can also use to determine the resistivity of transformer oil and lubricating oils. It is the best choice to determine volume resistivity of lubricating oils in the power industry, petroleum industry, scientific research institutes, and relative factories and companies.

The greatest features of this instrument are: testing scope is big, strong applicability, both can be used in transformer oil, also can be used in lubricating oil, safe and reliable operation.

II. Main technical specifications

1. Measurement voltage: DC 500 V;
2. Measurement range: $10^7 \sim 19.99 \times 10^{13} \Omega \cdot \text{cm}$;
3. Repeatability: $> 10^{12} \Omega \cdot \text{cm} \nlessgtr 25\%$;
 $< 10^{12} \Omega \cdot \text{cm} \nlessgtr 15\%$;
4. Heating power for temperature control: 300 W;
5. Temperature controlling range: $30^\circ\text{C} \sim 100^\circ\text{C}$;
6. Temperature control accuracy: $\pm 0.5^\circ\text{C}$;
7. Measurement error: $\leq \pm 10\%$;
8. Measurement electrode cup: 3 pieces;
9. Ambient temperature: $0^\circ\text{C} \sim 40^\circ\text{C}$;
10. Relative humidity: $\leq 85\%$;
11. Power supply: AC $220\text{V} \pm 10\%$, $50\text{Hz} \pm 1\text{Hz}$;
12. Dimensions: $440\text{mm} \times 350\text{mm} \times 320\text{mm}$ (length \times width \times height).