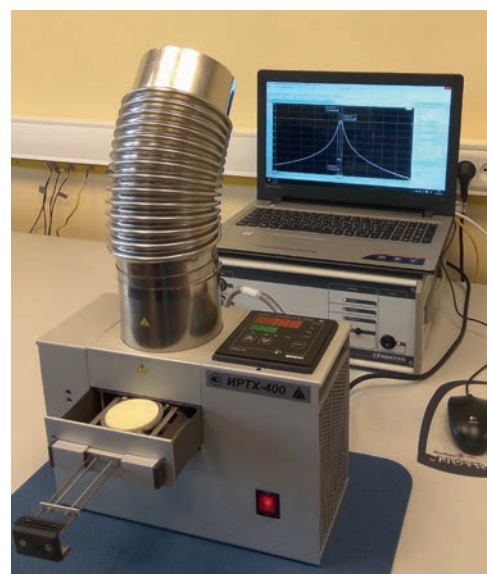


Installation for measuring the radio engineering characteristics of dielectric materials in the temperature range from 20 °C to 400 °C MREC-400

DESIGNED FOR

measurements of relative dielectric permittivity and tangent of dielectric loss angle of materials in the temperature range from 20 °C to 400 °C.



The installation implements the cavity method by GOST R 8.623-2015 "GSI. Relative dielectric permittivity and dielectric loss tangent of solid dielectrics. Methods of measurements in the microwave band». A feature of the installation is the heating of only the measured sample and one cavity wall, which provides a quick exit to the mode and low power consumption. Connection to local exhaust ventilation is provided to remove the heating products of the measured samples.

Temperature range	from 20 to 400 °C
Working frequency fixed in the range	from 8 to 12 GHz
Diameter of samples	49.5 mm
Thickness of samples	from 2.3 to 2.8 mm
Range by ϵ	from 2 to 10
Range by $\text{tg } \delta$	from $1 \cdot 10^{-4}$ to $5 \cdot 10^{-2}$
Relative error limit by ϵ	$\pm 2 \%$
Relative error limit by $\text{tg } \delta$	$\pm 20 \%$
Consumed power	not more than 300 Wt