

THERMAL INFRARED MULTISPECTRAL MAPPER (TIMM) FOR PHOBOS-GRUNT PROJECT.

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Introduction: Thermal Infrared Multispectral Mapper (TIMM) is intended for research of mineral structure and thermal properties of the Phobos surface at carrying out the “Phobos-Grunt” scientific space mission. The instrument is a imaging Fourier-spectrometer with a low spectral resolution.

Parameters: Spectral range – from 400 to 1400 cm^{-1} . Spectral resolution – 20 cm^{-1} . Image format – 90 x 90. Field of view – 9°. Spatial resolution – 0.1°. Duration of the measurement of the one interferogram – 10 s. Sensitivity ~ 0.001 $\text{W}/(\text{m}^2 \text{sr cm}^{-1})$. Mass – 2.5 kg. Power – 8 W. Size – 135 x 160 x 250 mm^3 .