



Low Energy X-ray Spectroscopic System

U R Rao Satellite Centre (URSC) of Indian Space Research Organization (ISRO) has developed Low Energy X-ray Spectroscopic System 0.5 keV to 10 keV using Swept Charge Device and Charge Coupled Devices.



Salient Features

- Low energy x-ray spectroscopy system for material analysis.
- X-ray detector system for laboratory experiments such as X-ray Diffraction, X-ray Reflection Fluorescence etc.
- + Detector system for space based applications such as planetary sciences and high energy astronomy.

Major Specifications

- ★ Energy Range 0.5keV to ~10keV.
- + System noise as low as $\sim 7e^{-1}$ RMS for high SNR.
- + Readout modes-
 - X-ray event based readout.
 - Full/partial image readout.
- + Up to 16 bits digitization.
- + Suitable for variety of CCD type detectors from various manufacturers.
- + CCD readout frequency Programmable up to 1Mega pixel per second.
- + Multiple channel readout up to 16 channels.
- + Scalable for multiple detector.

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Technology Transfer

URSC-ISRO offers to transfer this technology of Low Energy X-ray Spectroscopic System by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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