

SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT

Ramdeo Tekadi, Gittikhadan, Nagpur - 440013

Indigenous development of NIR Spectroscope for instant prediction of coal quality parameters

Tender document for Development of Hyperspectral Imaging Camera

Product Specifications		
Design		
1	Wavelength	900-1700 nm
2	Spectral channels	168
3	Spatial pixels	320
4	Max frame rate	508
5	Focal length	120 mm
6	Grating mount	Single
7	Detector Sensor	InGaAs
8	Pixel size	20 μm \times 20 μm
9	Interface	USB 3.0
10	Camera Calibration and Testing	In-depth calibration and testing
Light Source Integration		
11	Light source	Quartz Halogen lamp

12	Controls and components	DC/DC Converter and Boost Battery Charger A DC/DC converter provides power regulation and conversion for the system Halogen Light Control Circuit Power control
Electronics and Data Acquisition		
13	The Hand-held camera and PC software should have QT Application to control various functionalities	DCAM SDK integration. Data acquisition. Scanning and storing data cubes. Basic data analysis. Advanced data analysis. Cloud integration. Interface and Connectivity
14	Output generation format	.bil or its equivalent
15	User friendly GUI for Camera and Source control	Window based GUI
16	Deliverables	Indigenous Hyperspectral Camera System Software Package A stand-alone, portable device with auto-focus capability, capable of communicating with a remote server for image and data transfer; equipped with an all-weather casing, mounting arrangement (hanging), and supporting both battery and direct power operation

Kindly send the quotation on or before Monday,15th July 2024

Terms and Conditions:

- Payment: As per the development requirements
- Delivery period: 4 months
- Warranty: 2 Year

**Principal
RCOEM, Nagpur**