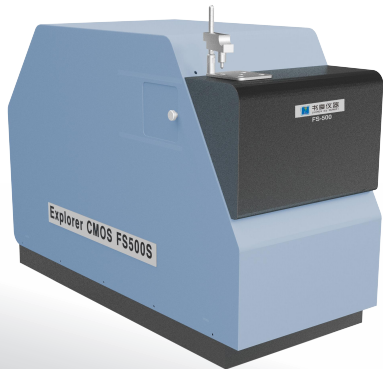


CMOS Full Spectrum Direct Reading Spectrometer FS500S



TECHNICAL SPECIFICATIONS

Project	Data
Optical system	High-performance holographic diffraction grating with 2700 grating lines/mm, primary dispersion rate: 0.74nm/mm, secondary dispersion rate: 0.37nm/mm
	Focal length: 500 mm
	Spectral wavelengths: 130-800 nm: The specific configuration range is selected by the customer
	Single CMOS 2084 pixels, the maximum resolution of 12*2084 pixels
Spark table	All optical system automatic tracing
	The closed vacuum light chamber can avoid the interference of dust and light
	Temperature stabilization system, light room constant temperature: 34 ± 0.1
	Special materials are used to cope with drift
Spark table	The light room is fitted with damped rubber pads to prevent vibration greatly reduces the risk of contamination in the light chamber
	The open spark excitation table can analyze samples of various shapes up to 20KG
	Argon purge spark table, low argon consumption
	Static argon purge design enables heat engine time less than 5 minutes
Spark table	Electrodes are easy to remove and maintain
	Convenient sample entrainment with safety protection, abnormal placement can not be stimulated
	Intelligent control inflation system: tidal flushing mode, cold machine (shutdown 12 hours) start no more than 30min, hot machine start time about 5min, ultra-low standby flow less than 60ml/min
	Adaptors for different samples to meet the needs of various samples (optional)

TECHNICAL SPECIFICATIONS

Project	Data
Spark power supply	Automatic computer control spark source, according to the test material to set a variety of parameters
	Semiconductor controlled discharge excitation
	Plasma currents from 1 to 100 A
	Discharge parameters are password protected
Control, electronic acquisition and data readout systems	The excitation parameters are adjustable
	The stable spark light source system is not affected by fluctuations in the power supply system
	Excitation parameters are calibrated and controlled by excitation line and analysis program
	Analysis time: 15-30 seconds
WinLab analysis software	High and low excitation frequency design, and spark frequency 20-1000HZ adjustable
	Spark duration 10-10000us adjustable
	The microprocessor controls the multi-channel integration and data acquisition system
	High-speed 16-bit analog-to-digital converter
Power source	ISP Mixed Signal Flash Microcontroller 100MHz
	High-speed USB data transmission design
	Up to 16 high-performance CCD detection modules can be customized
	This parameter is used on the Windows operating system
Laboratory environment	Office Custom software, user-friendly graphical interface
	Monitor, control instrument status, self-diagnosis function
	Process and calculate instrument data
	Simultaneous determination of elements and background
Laboratory environment	Calculation of the correction curve for each element takes into account various substrates (reference lines)
	Spectral line database
	Reference material database
	Historical data base
Laboratory environment	The graphic processing function automatically calculates the channel strength and deducts the background strength
	Automatic optical path calibration function
	Create or modify analyzers
	Curve calibration fitting
Laboratory environment	220V +/- 10%, single phase, 50/60 Hz, 10 A, 1.0 KVA
	Temperature: 10-30
Laboratory environment	Relative humidity: 20-80%

APPLICATION FIELD



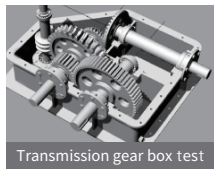
Diesel locomotive inspection



Fan detection



Generator set inspection



Transmission gear box test