

# DIODE ARRAY SPECTROMETERS

**PART NUMBER: PDA-512-USB or ISA**

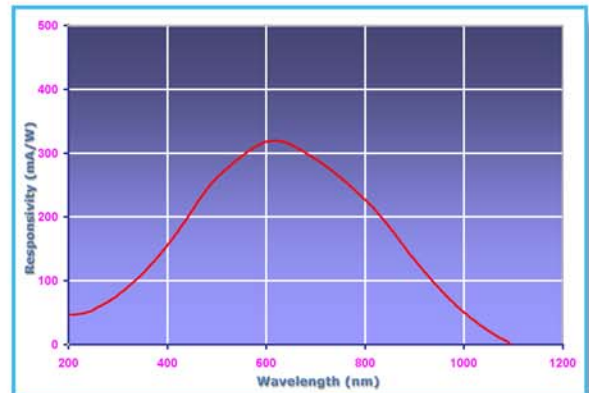
- ✓ USB 2.0 interface
- ✓ 16 BIT A/D with DAC offset
- ✓ On-board flash memory
- ✓ Enhanced 8051 microprocessor
- ✓ Mercury line source lamp and driver
- ✓ Strobe (TTL compatible)
- ✓ Two voltage controlled lamp drivers with with optical feedback
- ✓ Small and portable



Control Development, Inc. uses high performance silicon photo-diode arrays to provide high performance at very affordable prices for UV-VIS-NIR. Acquire complete spectra in just milliseconds...



Optional light sources



Standard Spectra Response

With its deep well, high dynamic range and linearity silicon photodiode arrays are ideal for high light level measurements where small changes need to be detected. Features like permanent wavelength calibration, on-board EEPROM calibration, and 16-Bit electronics provide a lot of performance at a very affordable price.

CDI spectrometers are ideal for process, QC, laboratory, and educational purposes.

We also offer integrated systems in portable computers, industrial chassis with single board computers, and battery-powered portables.



Probes for all your process requirements



2633 Foundation Drive, South Bend, IN 46628  
(574) 288-7338 - Fax (574) 288-7339  
Email: [Orders@controldevelopment.com](mailto:Orders@controldevelopment.com)  
[www.controldevelopment.com](http://www.controldevelopment.com)



Control Development, Inc. is an ISO 9001:2000 certified company

## Specifications:

Spectral Range _____	Select anywhere in 200nm to 1100nm
Input Fiber _____	400 micron core LOH or HOH fiber with 25 micron slit Std. Also available: 50 and 100 micron slits.
Optics _____	Very fast f/2.0 or f/3.0 Proprietary Design
Detector _____	512 element Silicon array
A/D Converter _____	16-Bit
Wavelength Accuracy _____	Better than 0.5 nm with AutoCal
Photometric Stability _____	±0.25%pk-pk over 24 hrs without re-referencing @ 653nm
Sensitivity _____	26,058 16-Bit ADC Counts/sec/μW/cm <sup>2</sup> /nm @ 425nm Input Irradiance of 0.2μW/cm <sup>2</sup> /nm 43,163 16-Bit ADC Counts/sec/μW/cm <sup>2</sup> /nm @ 575nm Input Irradiance of 1.05μW/cm <sup>2</sup> /nm 14,749 16-Bit ADC Counts/sec/μW/cm <sup>2</sup> /nm @ 775nm Input Irradiance of 2.25μW/cm <sup>2</sup> /nm
Noise Level _____	0.4 counts RMS, 1024 point sample, 6 mSec
Outputs _____	Modular Connector: Trigger, two strobes, light source shutter control, two fiber optic switch control and 5VDC @ 1A fused power supply output.
Computer Type _____	IBM compatible computer with Pentium processors
Interface _____	ISA or USB 2.0
Power Requirements _____	USB: 5VDC @ 0.6A Max 3W diss. power (lamps heating, servo, fan extra. ISA: 5 VDC, 6 Amps
Size _____	6.535" L X 4.173" H X 2.205 W

*Control Development, Inc. reserves the right to change specifications without notice.*

**Ordering Information: PDA-512-USB or ISA**

**Affordably Priced At \$3,495.00**  
**Call for quantity, OEM, and educational discounts**



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