

## SXJ-D: Digital, USB Joulemeter



### USB Powered, Software Driven Joulemeter Probes.

These incredible new Joulemeter probes are powered through the USB port on your laptop or desk top computer. LabView Applications Software gives you full instrument controls like range, trigger level, wavelength correction, area factor, etc. Measure, collect data, analyze and plot your measurements.

Packaged in a unique modular housing that includes the Pyroelectric or Silicon sensor, fast integrating circuit, microprocessor and USB connection – these probes are easy to incorporate into a single, dual or multi-channel system – limited only by the number of USB ports available.

#### Features common to both single and dual channel Application Software:

- ✓ Live display in J or J/cm<sup>2</sup>
- ✓ Statistics; min, max and standard deviation
- ✓ Graphic displays; strip chart, histogram and tuning
- ✓ Wavelength correction
- ✓ Window transmission correction (attenuation)
- ✓ Background Null (offset)
- ✓ Controls include range, trigger level
- ✓ Data file and analysis mode (stats and graphs)

#### Dual Channel Features:

- ✓ Display A, B and Ratio simultaneously
- ✓ Ratio A/B or B/A in decimal format
- ✓ 2CH data collection with time stamp
- ✓ Full data analysis and graphics for A, B and Ratio

### SPJ-D-8 and SPJ-D-8-OB Pyroelectric Joulemeter

These Joulemeter probes include a 7.8 mm square Pyroelectric detector element – one with a fast, Chromium coating for use at high rep rates (1,000 pps) – and the other with a Black Absorbing coating for high output and at spectral response from 0.1 to 1000  $\mu\text{m}$ . Measure from 50 nJ to 50 mJ and from fsec to  $\mu\text{sec}$  pulses.

### SSJ-D-5 and SSJ-D-10 Silicon Joulemeter

Our Silicon Joulemeter probes are based on UV enhanced Photodiodes and are incredibly sensitive in the 0.2 to 1.1  $\mu\text{m}$  spectral range. Measure from fJ to  $\mu\text{J}$ , from a single pulse to 1000 pps and from fsec to  $\mu\text{sec}$  pulses.

Spectrum Detector Inc.

Detector solutions that cover the spectrum.

	SPJ-D-8	SPJ-D-8-OB	SSJ-D-5	SSJ-D-10	Units
Wavelength Range	0.1 to 1000	0.1 to 1000	0.2 to 1.1	0.2 to 1.1	$\mu\text{m}$
Energy Range	2 $\mu\text{J}$ to 20mJ	2 $\mu\text{J}$ to 20mJ	2pJ to 20nJ	2pJ to 20nJ	
Energy Resolution	10 nJ	10 nJ	10 fJ	10 fJ	
Max Rep Rate	1000	400	1000	1000	PPS
Max Pulse Width	15 $\mu\text{sec}$	15 $\mu\text{sec}$	15 $\mu\text{sec}$	15 $\mu\text{sec}$	
Max Average Power	500	500	1	1	mW/cm <sup>2</sup>
Detector Size	7.8 x 7.8	7.8 x 7.8	5	10	mm
Detector or Coating Type	Pyro/Chrome	Pyro/Black	Silicon	Silicon	
Analog Voltage Output	0-2	0-2	0-2	0-2	V
Power Supply	USB	USB	USB	USB	

