Analog Laser Power Probes

アナログ レーザーパワープローブ



特別価格 35,000 円/個

Laser power measurements should be quick and easy. They should not involve time consuming set-up and alignment problems. Ideally, the measurements should also be able to be made at any point in an optical system where losses are likely to occur. Unfortunately, most laser power meters have sacrificed ease of use to gain continuous power readings. However, in most laboratory and production situations, the usual requirement is for a quick spot-check of power with a minimum of disruption. Even when tuning up a laser, researchers have found that it is best to tune for a desirable mode pattern

The Power Probes are calorimeter-type power meters which measure laser power using a timed exposure. They display average power absorbed on a calibrated readout scale and can be used with continuous or repetitively pulsed lasers ranging from small 2 watt YAG lasers to large 10,000 watt CO₂ lasers.

Model	Power Range	THE RESERVE AND ADDRESS OF THE PARTY OF THE	Damage Threshold‡ (at max Power)	Exposure Time	Watts/ Division	Absorbing Head	Overall Length (cm)	Weight (gm)	Accuracy §	Repeatability
P50Y	0-50W	900-1250nm*	3000W/cm2	20 sec.	0.5	4.58 x 2.54 cm (1.8" x 1")	22	98	+/-5%	+/-1.5%

Type probe wavelength range - These probes are calibrated at 8-11µ as well, but have a lower damage threshold for this range than the C type probes. Calibration for any wavelength between 250nm – 2500nm is available upon request with an NIST certificate.

Damage Threshold - Moving the probe during exposure will increase (up to double) the damage threshold compared to the numbers shown for a stationary probe. To achieve this increase, the head must be moved in a circular motion so that the laser beam does not strike any one area continuously for more than 1.5 seconds.

Accuracy and Exposure Time - The accuracy and repeatability of the Power Probes partly depends on the accuracy of the exposure time. The average accuracy of exposures (hand held) has been found to be 0.2 seconds. This amounts to a 1% error for a 20 second exposure time. Many lasers are equipped with a shutter that can produce an exact time exposure.