## **J6502-2 IRRADIANCE PROBE**



The J6502-2 is designed to measure irradiance in  $mw/m^2$  where light incident upon a surface must be measured. Measurements are made with the J6502-2 pointed at the light source. Narrow angle light sources such as lasers which do not fill the entire active area of the sensor may be measured in which case  $1mW/m^2$  =  $1 \times 10^{-4} mW$ .

A silicon photodiode and multilayer glass filter are used to provide a flat spectral response within  $\pm 7\%$  from 450 to 950 nanometers. The J6502-2 has useable response between 375 nM and 1100 nM. The effective plane of the sensor is 5 mm behind the glass filter front surface.

The probe has been calibrated in  $mW/m^2$  independently of the J16, thereby permitting interchangeability of probes without the need for recalibration of either unit. A hold switch is provided to allow the reading to be stored at any time. A standard 0.25-20 mounting socket is located on the bottom for use in mounting on an optical bench or tripod.

SPECIFICATIONS (When used with a J16)

Measurement ranges: 0.01 to 19.900  $mW/m^2$ 

Spectral response: flat within  $\pm 7\%$  from 450-950 nanometers

Sensor active area: 1 CM2 ±5%

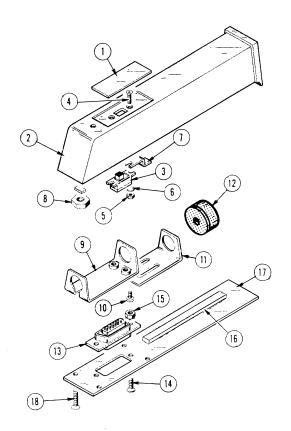
Accuracy: Within 5% of NBS standards and  $\pm 1$  digit in the last place. Probes individually calibrated to a tungsten light source traceable to NBS.

## DATA SHEET

NO.0<u>62-1553-01</u> DATE AUG 1973



## REPLACEABLE PARTS LIST



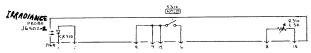


Fig. & Index No.	Tektronix Part No.	Serial/Model No. Eff Disc	Q t y	Description
-1	334-2055-00		1	LABEL, information
-2	380-0298-00		1	HOUSING, probe
-3	260-0960-00		1	SWITCH, slide (S310)
-4	211-0030-00		2	SCREW, 2-56 x 0.25 inch, 100° csk, FHS
-5	210-0405-00		2	NUT, hex., 2-56 x 0.188 inch
-6	210-0001-00		2	WASHER, lock, internal, 0.092 ID
	311-1239-00		1	RESISTOR, variable, 2.5 k $\Omega$ , (R310) (not shown)
<b>-</b> 7	343-0406-00		1	CLAMP, variable resistor
-8	210-0411-00		1	NUT, hex., 0.25-20 x 0.438 inch
-9	343-0380-00		1	CLAMP, rear
-10	211-0022-00		2	SCREW, 2-56 x 0.188 inch, PHS
-11	343-0379-00		1	CLAMP, front
-12	152-0550-00		1	SEMICONDUCTOR DEVICE, photo w/radiometric filters (CR310)
-13	131-0459-00		1	CONNECTOR, receptacle, electrical, 15 pin, male (J160)
-14	211-0101-00		2	SCREW, 4-40 x 0.25 inch, 100° csk, FHS
-15	210-0586-00		2	NUT, keps, 4-40 x 0.25 inch
-16	252-0603-00		ft	
-17	200-1409-00		1	COVER, probe
-18	211-0022-00		4	SCREW, 2-56 x 0.188 inch, PHB