

SENSORMETERS

Light - Magnetic Flux

LIGHT SENSORMETER

Uses:

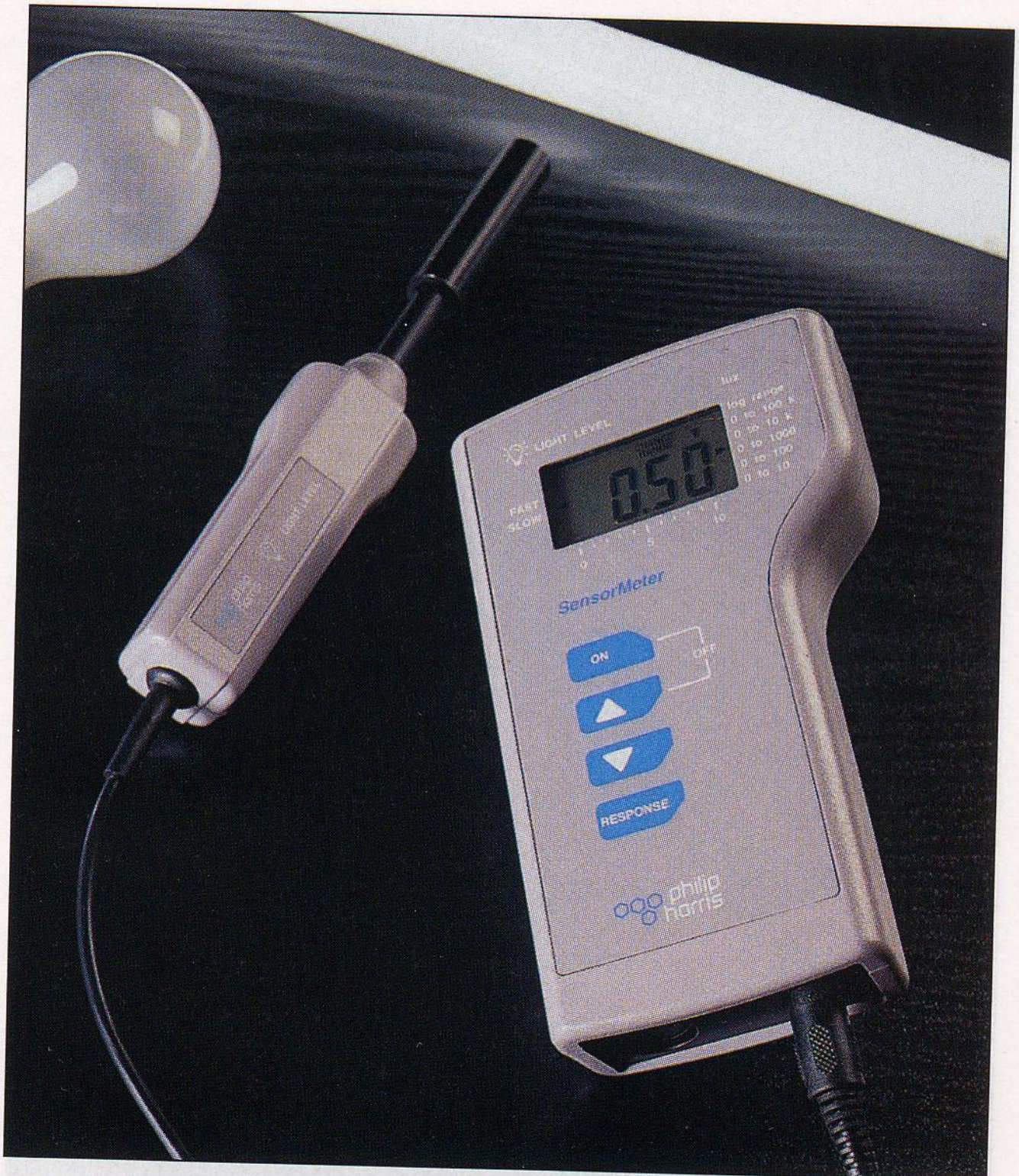
- Inverse Square Law
- Environmental work
- Rate of enzyme reaction (e.g. Starch and amylase)
- Photosynthesis in Chlorella
- Temperature and sugar concentration effects on yeast growth



The Light SensorMeter measures light intensity over a very wide range (from 0.1 to 100,000 lux) in five separate ranges in addition to a log range. The speed of response of the SensorMeter can be altered on the linear ranges enabling changes in light intensity which occur at intervals of less than 50ms to be detected. This can be used to record the 100Hz flicker of fluorescent lights. Conversely the slow setting can be used to cut out the interference from fluorescent light flickering. Supplied complete with a probe with an adjustable hood which can be used to vary the acceptance angle of the probe over a wide range. This is useful in studies where the direction of illumination is important.

- **Spectral response:** 400 - 700nm with optional IR filter, 400 - 1000 without filter.
- **Response time:** fast approx 50 μ s, Slow approx 50ms.
- **Readability:** 0.01 lux on 10 lux range.
- **Battery life:** 80 hours typical with MN 1604 Manganese Alkaline Battery (Battery NOT included).

Ranges	Display accuracy	Computer output accuracy	Display resolution	Computer resolution
Log range	± 0.3 over range 0 to 4 log lux	± 0.3	$\pm 0.5\%$ full scale	$\pm 0.2\%$ full scale
0 to 100k lux	$\pm 15\%$ full scale	$\pm 15\%$ full scale	$\pm 0.5\%$ full scale	$\pm 0.2\%$ full scale
0 to 10k lux	$\pm 15\%$ full scale	$\pm 15\%$ full scale	$\pm 0.5\%$ full scale	$\pm 0.2\%$ full scale
0 to 1000 lux	$\pm 15\%$ full scale	$\pm 15\%$ full scale	$\pm 0.5\%$ full scale	$\pm 0.2\%$ full scale
0 to 100 lux	$\pm 15\%$ full scale	$\pm 15\%$ full scale	$\pm 0.5\%$ full scale	$\pm 0.2\%$ full scale
0 to 10 lux	$\pm 15\%$ full scale	$\pm 15\%$ full scale	$\pm 0.5\%$ full scale	$\pm 0.2\%$ full scale



Accessories

Infra-red filter

For eliminating infra-red wavelengths from the light source.