



QSL-2100 Scalar PAR Irradiance Sensor

Allows direct connection to any PC or Laptop Computer

Improvements notwithstanding, the basic mission of the QSL Series has not changed -- provide accurate measurement of photosynthetically active quantum scalar irradiance (PAR) in aquatic or dry environments.

The QSL-2100 Quantum Scalar Light sensor is a new digital version of our widely used QSL-100 laboratory sensor to provide direct connection to a PC for both real-time display and logging of irradiance measurements.

The QSL-2100/2101 sensors feature a Teflon® spherical optical collector (1.9 cm in diameter on the QSL-2100 and 1.3 cm in diameter on the QSL-2101) mounted on a 25-cm stainless-steel wand. This proven design allows convenient measurement of photosynthetically active light directly in laboratory and field applications ranging from growth chambers to rain forests and shallow ponds.

Using new, low-power circuitry, energy for the sensor is supplied by the computer's serial port, eliminating the need for batteries.



The QSL-2100 connects directly to PC via RS-232 cable

Photosynthetic organisms in suspension are commonly viewed as scalar collectors -- responding to light from all directions. Nevertheless, many researchers commonly measure plane irradiance -- a measurement proportional to the cosine of the angle of incidence.

The small collector size and convenient hand wand ensures that Biospherical Instruments' QSL scalar sensors provide accurate light measurements from virtually all directions in the field or in

laboratory apparatus used for growing such organisms as photosynthetic bacteria, plankton, kelp, and higher plants. The QSL-2101 collector is specifically designed for insertion in vials of the type commonly used in photosynthetrons. The new, lightweight QSL-2100 and QSL-2101 are waterproof to two meters, making them ideal for conducting field-studies in leaf canopies, streambeds and shallow ponds.

Key Features

- Allows accurate light measurements from virtually all directions (as opposed to similar instruments that measure light from only one direction)

- Measures photosynthetically available scalar irradiance (scalar PAR -- 400-700 nm)

- The new QSL-2100 and QSL-2101 sensors are waterproof to two meters

- 1.9 cm (QSL-2100) or 1.25 cm (QSL-2101) diameter Teflon® spherical irradiance collectors

- Ideal for use in the laboratory or in aquatic and terrestrial field studies

