E90 Quantum Sensor

The Quantum sensor is to measure photosynthetically active radiation (PAR) ranging from 400 to 700nm waveband. The sensor comes in a very small housing and suitable for different applications:

** Plant science
** Meteorology
** Hydrology
** Horticulture
** Ecology
** Environmental science
** Others

The E90 Quantum sensor consists of a diffusion type of photodiode with filter in a housing. The housing for Quantum sensor is well designed to provide a good cosine corrected response to light coming from different angles. Besides, an interference filter is used to provide a sharp cutoff at 700nm to reduce measuring error.

E90 Specifications:

Sensitivity	: Typical 10uA (or 1.0mV with 100 Ohm precise resistor) per 1000 umols^{-1}m^{-2}
Linearity	: Maximum deviation of 1% up to 10,000 umols^{-1}m^{-2}
Accuracy	: ±4%
Stability	: <±2% change over a 1 year period
Response time	: Typical 1us
Temperature Dependence	: 0.15% per ℃ maximum
Cable length	: 50ft (15M) or 100ft (30M)
Storage temp.	: -20℃ to +70℃