

QED ATTENUATOR

DESCRIPTION

The QED attenuators increase the energy, energy density, average power and average power density capabilities of the QE Series detectors. They are engineered to typically transmit 30-50% (@1.064 μm)^a of the incident radiation to the detector in a near Lambertian pattern (very wide diffusion pattern). Their slide-in casing make them easy to install and remove and they are held securely in place with the use of simple set screws. Since they become part of the detector, it is important to understand how they will affect the calibration.

CALIBRATION OPTIONS

When buying a QE detector with a QED attenuator, 4 calibration options are available:

STANDARD CALIBRATION

QE Detector Alone:	Fully calibrated, from 248 - 2500 nm
With QED Attenuator:	Not calibrated (Calibrated by the user)



EXTRA QED CALIBRATION - QED-CAL-1

QE Detector Alone:	Fully calibrated, from 248 - 2500 nm
With QED Attenuator:	Calibrated at one wavelength (1064 nm)



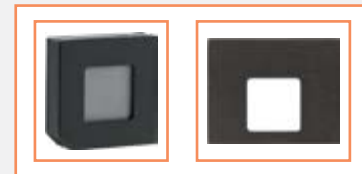
CALIBRATED AS A PAIR (-QED EXTENSION) - QED-CAL-2

QE Detector Alone:	Not calibrated
With QED Attenuator:	Fully calibrated, from 308 - 2100 nm



FULL CALIBRATION - QED-CAL-3

QE Detector Alone:	Fully calibrated, from 248 - 2500 nm
With QED Attenuator:	Fully calibrated, from 308 - 2100 nm (This configuration comes with a DB-15 adaptor for the QED calibration)



SPECIFICATIONS

PHYSICAL CHARACTERISTICS	QED-12	QED-25	QED-50	QED-65	QED-95
Spectral Range*	200 - 2100 nm	200 - 2100 nm	200 - 2100 nm	200 - 2100 nm	200 - 2100 nm
Effective Aperture	9 x 9 mm	22 x 22 mm	47 x 47 mm	62 x 62 mm	90 mm \emptyset
Dimensions	30.5H x 41W x 12.5D mm	44H x 55W x 12.5D mm	69H x 80W x 12.5D mm	85H x 97W x 12.5D mm	115H x 127W x 12.5D mm
For use with	QE12	QE25	QE50	QE65	QE95

ORDERING INFORMATION^{b,c}

Product Name (QED alone)	QED-12	QED-25	QED-50	QED-65	QED-95
Product Number	201200	201199	201198	201282	201323

a. See the full transmittance curve on page 64.

b. For ordering information about the detectors, check the product pages.

c. Ordering information of the QE-QED kits calibrated as a pair can be found on the individual specifications sheets of the QE products.

* The attenuators are not calibrated below 308 nm