QE95

95 mm Ø, 15 µJ - 250 J

KEY FEATURES

1. **MODULAR CONCEPT**
   Increase the power capability of your detector: 2 different cooling modules
2. **EXTRA LARGE APERTURE**
   Effective aperture of 95 mm Ø
3. **QED ATTENUATOR AVAILABLE**
   - Measure up to 5X higher energies
   - Available with optional calibration, all wavelengths between 532 & 1064 nm, or single wavelength
4. **LOW NOISE LEVEL**
   15 µJ for the MB coating
5. **TEST TARGET INCLUDED**
   With the MB models
6. **SMART INTERFACE**
   Containing all the calibration data
7. **integra OPTIONS**
   - Standard: USB Output (-INT)
   - In Option: RS-232 Output (-IDR) and External Trigger (-INE)

AVAILABLE MODELS

QE95LP-S-MB
(Broadband-Convection)

QE95LP-H-MB
(Broadband-Heatsink)

QE95ELP-S-MB
(Long Pulse-Convection)

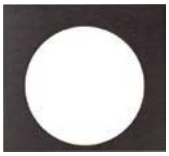
QE95ELP-H-MB
(Long Pulse-Heatsink)

ACCESSORIES

Stand with Delrin Post
(200428, For -S Model)

Stand with Delrin Post
(201284, For -H Model)

DB-15 to BNC Adaptor
(Model Number: 200036)



QED-95 Attenuator
(Model Number: 201323)

Pelican Carrying Case

SEE ALSO

QE95

CE NIST* Traceable WEEE/RoHS

*Also traceable to NRC-CNRC

SPECIFICATIONS

	QE95LP-S-MB		QE95LP-H-MB		QE95ELP-S-MB		QE95ELP-H-MB	
MAX MEASURABLE ENERGY (WITH ATTENUATOR)	250 J		250 J		250 J		250 J	
MAX REPETITION FREQUENCY	40 Hz		40 Hz		10 Hz		10 Hz	
EFFECTIVE APERTURE	95 mm Ø		95 mm Ø		95 mm Ø		95 mm Ø	
MEASUREMENT CAPABILITY								
Spectral Range *	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator
	0.19 – 20 µm	0.3 - 2.1 µm	0.19 – 20 µm	0.3 - 2.1 µm	0.19 – 20 µm	0.3 - 2.1 µm	0.19 – 20 µm	0.3 - 2.1 µm
Maximum Measurable Energy [a,b]	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator
1064 nm, 150 µs pulse, Single shot [c]	35 J	250 J	35 J	250 J	70 J	250 J	70 J	250 J
1064 nm, 7 ns, 10 Hz	35 J	150 J	35 J	150 J	35 J	150 J	35 J	150 J
266 nm, 7 ns, 10 Hz	30 J	50 J	30 J	50 J	30 J	50 J	30 J	50 J
Noise Equivalent Energy [d]	15 µJ		15 µJ		30 µJ		30 µJ	
Sensitivity [e,f]	2 V/J		2 V/J		0.6 V/J		0.6 V/J	
Max Repetition Frequency	40 Hz		40 Hz		10 Hz		10 Hz	
Maximum Pulse Width (typical)	1.5 ms		1.5 ms		5 ms		5 ms	
Rise Time (typical 0-100 %)	2 ms		2 ms		6 ms		6 ms	
Calibration Uncertainty [g]	±3 %		±3 %		±3 %		±3 %	
Repeatability	<0.5 %		<0.5 %		<0.5 %		<0.5 %	
DAMAGE THRESHOLDS								
Maximum Average Power	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator
All Wavelengths	20 W	45 W	40 W	90 W	20 W	45 W	40 W	90 W
Maximum Energy Density	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator
1064 nm, 150 µs, 10 Hz	1.2 J/cm²	14 J/cm²	1.2 J/cm²	14 J/cm²	1.2 J/cm²	14 J/cm²	1.2 J/cm²	14 J/cm²
1064 nm, 7 ns, single shot	0.6 J/cm²	16 J/cm²	0.6 J/cm²	16 J/cm²	0.6 J/cm²	16 J/cm²	0.6 J/cm²	16 J/cm²
1064 nm, 7 ns, 10 Hz	0.6 J/cm²	8 J/cm²	0.6 J/cm²	8 J/cm²	0.6 J/cm²	8 J/cm²	0.6 J/cm²	8 J/cm²
532 nm, 7 ns, 10 Hz	0.6 J/cm²	6 J/cm²	0.6 J/cm²	6 J/cm²	0.6 J/cm²	6 J/cm²	0.6 J/cm²	6 J/cm²
266 nm, 7 ns, 10 Hz	0.5 J/cm²	1 J/cm²	0.5 J/cm²	1 J/cm²	0.5 J/cm²	1 J/cm²	0.5 J/cm²	1 J/cm²
Maximum Average Power Density (@12 W)	10 W/cm²	600 W/cm²	10 W/cm² [h]	600 W/cm²	10 W/cm²	600 W/cm²	10 W/cm² [h]	600 W/cm²
PHYSICAL CHARACTERISTICS								
Effective Aperture (with Attenuator)	95 mm Ø (90 mm Ø)							
Absorber	Multi-Band		Multi-Band		Multi-Band		Multi-Band	
Dimensions	122H x 122W x 20D mm		122H x 122W x 98D mm		122H x 122W x 20D mm		122H x 122W x 98D mm	
Weight	0.78 kg		1.2 kg		0.78 kg		1.2 kg	
ORDERING INFORMATION	Standard	With Attenuator [i]	Standard	With Attenuator [i]	Standard		Standard	
Product Name	QE95LP-S-MB	QE95LP-S-MB-QED	QE95LP-H-MB	QE95LP-H-MB-QED	QE95ELP-S-MB		QE95ELP-H-MB	
Product Number (Including stand)	201315	202196	201316	202197	201317		201318	
Add Extension for INTEGRA (USB)	-INT	-INT	-INT	-INT	-INT		-INT	
Product Number (Including stand)	202777	202779	202773	202775	202771		202769	
Add Extension for INTEGRA (RS-232)	-IDR	-IDR	-IDR	-IDR	-IDR		-IDR	
Add Extension for INTEGRA (Ext Trig)	-INE	-INE	-INE	-INE	-INE		-INE	

Specifications are subject to change without notice

** For the calibrated spectral range, see the user manual.*

a. Not exceeding Maximum Average Power.
b. maximum depends on monitor.
c. Increasing pulse width increases the maximum measurable energy.
d. Nominal value, actual value depends on electrical noise in the measurement system.
e. Load: 1 MΩ and ≤ 30 pF.
f. Maximum output voltage = sensitivity x maximum energy.
g. Excludes non-linearities.
h. At 12 W. Maximum Average Power Density is 5 W/cm² @ 40 W
i. When -QED extension is added, the QE + QED come as one unit with a combined calibration only. See the "QED Attenuator" page for more options on the calibration.