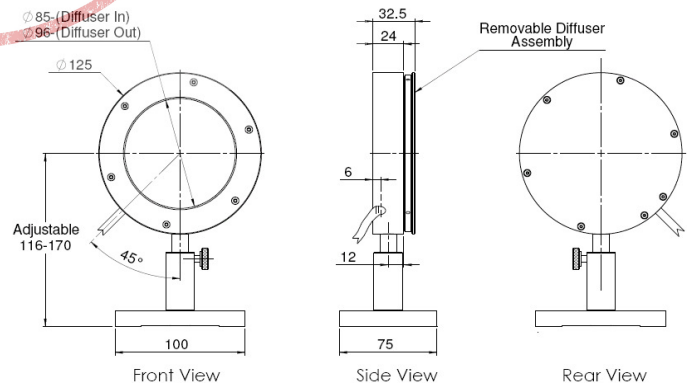


PE100BB-DIF

Pulse Energy Measurements 2mJ to 40J, up to 20Hz

Specifications	PE100BB-DIF Diffuser out	Diffuser in		
Aperture:	φ96mm	φ85mm		
Spectral Response:	0.15 – 20μm	0.4 – 2.5μm		
Surface Reflectivity:	5%	15%		
Calibration Accuracy:	± 3%	± 3%		
Additional Error with Wavelength:				
193nm	±2%	N.A.		
248nm	±2%	N.A.		
400-800nm	±2%	See note a		
1064nm	0	0		
1.5-2.5μm	±2%	See note b		
2.1μm	±2%	0		
2.94μm	±2%	N.A.		
10.6μm	±5%	N.A.		
Damage Threshold:				
<100ns	0.3J/cm ²	3J/cm ²		
1μs	0.3J/cm ²	3J/cm ²		
300μs	1J/cm ²	10J/cm ²		
Linearity with Energy:	±2% for >10% of full scale	±2% for >10% of full scale ^d		
Maximum Average Power:	15W	40W		
Max Ave Power Density:	10W/cm ²	500W/cm ²		
Max Pulse Width Setting:	Short	Short	Long	
Maximum Pulse Width:	3ms	10ms	3ms	10ms
Additional Error with Pulse Width		-2% at 6ms -4% at 10ms		-2% at 6ms -4% at 10ms
Maximum Pulse Rate:	20Hz	10Hz	20Hz	10Hz
Energy Scales:	20mJ to 10J	20mJ to 10J	200mJ to 40J ^c	200mJ to 40J ^c
Lowest Measurable Energy: (1064nm)	2mJ	2mJ	15mJ	15mJ
Noise on Lowest Range:	150μJ	200μJ	1.5mJ	2mJ
Additional Error with Frequency:	-2% at 17Hz -4% at 20Hz	±2% at 9Hz, -4% at 10Hz	-2% at 17Hz -4% at 20Hz	±2% at 9Hz, -4% at 10Hz
Cooling:	Convection			
Notes:	a: Calibrated for 532nm b: With diffuser installed, head is not calibrated at these wavelengths but provision is made for user calibration c: With diffuser in, head may saturate before end of range. In this case, use next higher range. d: 40J range may not measure down to 10% of scale. Use next lower range			



Ordering information		
Item	Description	Ophir P/N
PE100BB-DIF	95/85mm aperture pyroelectric energy meter with broadband absorber and removable diffuser	1Z02883 / 7Z02883 (RoHS)

Rev12/soc/1.6.09/ea

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