

1.1.1.2 Round Photodiode Sensors

20pW to 3W

Features

- Round geometry for easy centering
- Threaded to fit standard SM1 bench equipment
- Same performance as standard PD300 sensors
- Comes with removable filter as standard
- Fiber optic adapters available

PD300R Filter Off



PD300R Filter installed



Model	PD300R			PD300R-3W			PD300R-UV			PD300R-IR				
Use	General			Powers to 3W			Lowest powers from 200-1100nm			IR wavelengths 700-1800nm				
Detector Type	silicon			silicon			silicon			germanium				
Aperture	φ10mm			φ10mm			φ10mm			φ5mm				
Filter mode	Filter out	Filter in		Filter out	Filter in		Filter out	Filter in		Filter out	Filter in			
Spectral Range nm	350-1100	430-1100	430-1100	350-1100	430-1100	430-1100	200-1100	220-1100	220-1100	700-1800	700-1800	700-1800		
Power Range	30mW to 500pW	300mW to 200μW	300mW to 200μW	100mW to 5nW	3W to 200μW	3W to 200μW	3mW to 20pW	300mW to 2μW	300mW to 2μW	30mW to 5nW	300mW to 200μW	300mW to 200μW		
Power Scales	30mW to 30nW and dBm	300mW to 30mW and dBm	300mW to 30mW and dBm	100mW to 300nW and dBm	3W to 30mW and dBm	3W to 30mW and dBm	3mW to 3nW and dBm	300mW to 300μW and dBm	300mW to 300μW and dBm	30mW to 30nW and dBm	300mW to 30mW and dBm	300mW to 30mW and dBm		
Resolution nW	0.01	NA		0.1	NA		0.001	100		0.01	NA			
Maximum Power vs. Wavelength	nm	mW	mW	nm	mW	mW	nm	mW	mW	nm	mW	mW		
	<488	30	300	<488	100	3000	250 - 350	3	300	800	12	120		
	633	20	300	633	100	3000	400	3	300	1000-1300	30	300		
	670	13	200	670	100	2500	600	3	300	1400	30	250		
	790	10	100	790	100	2000	800 - 950	2.5	150	1500	25	80		
	904	10	150	904	100	2000	1064	3	30	1600	30	100		
	1064	25	250	1064	100	3000				1800	30	300		
Accuracy (including errors due to temp. variations)														
% error vs Wavelength nm	±10	360-400	NA	±10	360-400	NA	±6	200-270	NA	±5	700-900	±7	700-900	
	±3	400-950	±5	430-950	±3	400-950	±5	430-950	±5	430-950	±4	900-1700	±6	900-1700
	±5	950-1100	±7	950-1100	±5	950-1100	±7	950-1100	±7	950-1100	±7	1700-1800	±9	1700-1800
Damage Threshold W/cm ²	10	50		10	100		10	50		10	50			
Max Pulse Energy μJ	2	20		20	500		0.4	15		0.3	3			
Noise Level for filter out pW	20			200			±1			200				
Response Time with Meter s	0.2			0.2			0.2			0.2				
Beam Position Dependence	±2%			±2%		±3%	±2%			±2%				
Fiber Adapters Available (see page 41)	SMA, FC, ST			SMA, FC, ST			SC, ST, FC, SMA			SC, ST, FC, SMA				
Version														
Part Number	7Z02436			7Z02437			7Z02438			7Z02439				

PD300R

