10pJ to 15µJ

Features

- Silicon and Germanium detectors
- Very sensitive - down to 10pJ
- Repetition rates to 20kHz
- Wide spectral range

PD10-C / PD10-IR-C / PD10-pJ-C / PD10-IR-pJ-C

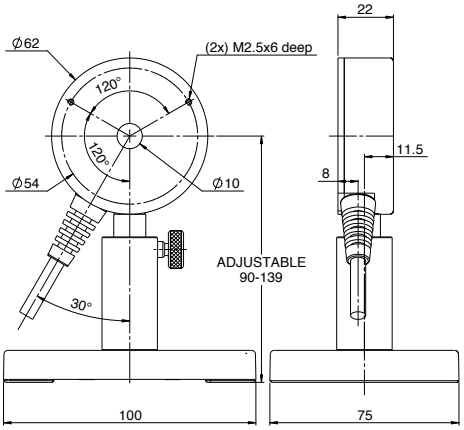
Model	PD10-C	PD10-IR-C	PD10-pJ-C	PD10-IR-pJ-C
Use	Low energies	Infrared	Lowest energies	Infrared, lowest energies
Aperture mm	Ø10	Ø5	Ø10	Ø5
Absorber Type	Si photodiode	Ge photodiode	Si photodiode	Ge photodiode
Spectral Range µm [a]	0.19 - 1.1	0.7 – 1.8	0.2 - 1.1	0.7 - 1.8
Surface Reflectivity % approx.	50	30	30	30
Calibration Uncertainty ±% [a]	5	5	5	5
Energy Scales	20µJ to 20nJ	600nJ to 6nJ	200nJ to 200pJ	20nJ to 200pJ
Lowest Measurable Energy nJ [b]	1 at 900nm	1 at 1550nm	0.01 at 900nm	0.03 at 1550nm
Max Pulse Width ms	0.005	0.005	0.005	0.005
Maximum Pulse Rate pps	20kHz	10kHz	20kHz	10kHz
Noise on Lowest Range nJ	0.05	0.1	0.001	0.01
Additional Error with Frequency %	±1% to 20kHz [c]	±1.5% to 10kHz	±1% to 20kHz [d]	±1.5% to 10kHz
Linearity with Energy for > 10% of full scale [b]	±1.5%	±1.5%	±1.5%	±1.5%
Damage Threshold J/cm²	0.1	0.1	0.1	0.1
Maximum Average Power mW	50 at 800nm	6	0.5	0.2
Maximum Average Power Density W/cm²	50	50	5	5
Maximum Energy vs. Wavelength	Wavelength / Max Energy	Wavelength / Max Energy	Wavelength / Max Energy	Wavelength / Max Energy
	<300nm 15µJ	800 - 900nm 600nJ	<300nm 150nJ	800 - 900nm 20nJ
	350 - 550nm 8µJ	1000 - 1300nm 200nJ	350 - 550nm 75nJ	1000 - 1300nm 8nJ
	>800nm 5µJ	1300 - 1400nm 170nJ	>800nm 50nJ	1300 - 1400nm 7nJ
		1480 - 1560nm 150nJ		1480 - 1560nm 6nJ
		>1650nm 600nJ		>1650nm 20nJ
Fiber Adapters Available (see page 109)	ST, FC, SMA, SC	ST, FC, SMA, SC	ST, FC, SMA, SC	ST, FC, SMA, SC
Weight kg	0.25	0.25	0.25	0.25
Compliance	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS
Version				
Part number	**7Z02944**	**7Z02955**	**7Z02945**	**7Z02946**
Note: (a) This is basic calibration accuracy. In certain wavelength regions calibration there is additional error as tabulated here.	<250nm add ±3% >950nm add ±2%	<900nm add ±2% >1700nm add ±2%	<250nm add ±2% >950nm add ±2%	<900nm add ±2% >1700nm add ±2%

Note: (b) With the "user threshold" setting set to minimum. For other settings, the spec is for >10% of full scale or greater than twice the "user threshold", whichever is greater. The user threshold is not available with LaserStar, Nova/Orion, Pulsar, USBI and Quasar. For these meters, the threshold is set to minimum and the linearity spec is >10% of full scale. The PD-C series will only operate with Nova or Orion meters with an additional adapter Ophir P/N 7Z08272 (see page 110). The adapter can introduce up to 1% additional measurement error. The user threshold feature allows adjustment of the internal threshold up to 25% of full scale if desired to avoid false triggering in noisy environments.
For further information, see the FAQs on our Website.

Note: (c) Additional Error with Frequency of ±1% only for energies up to 2µJ. For higher energies ±1% up to 10kHz, -4% at 20kHz.

Note: (d) Additional Error with Frequency of ±1% only for energies up to 20nJ. For higher energies ±2% up to 10kHz, -5% at 20kHz.

PD10-C / PD10-pJ-C



PD10-IR-C / PD10-IR-pJ-C