

1.1.1.6 Integrating Spheres

1.1.1.6.1 Small Dimensions 1"-1.6"

500nW to 3W

Features

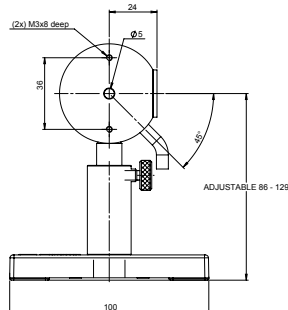
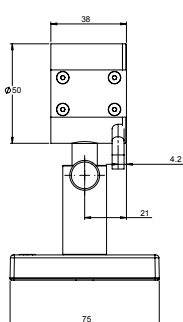
- Integrating sphere for divergent beams (LEDs, VCSELs, etc.)
- Up to Ø12mm aperture
- Fiber or free space input



Model	IS-1-2W	3A-IS	3A-IS-IRG
Use	Divergent beams to 2W for UV to NIR	Divergent beams to 3W for visible and NIR	Divergent beams to 3W for IR
Detector Type	Si	Si	InGaAs
Input Port Aperture mm	Ø5mm	Ø12mm	Ø12mm
Spectral Range μm	0.22 - 1.1	0.35 - 1.1	0.8 - 1.7
Power Range	500nW - 2W	1 μW - 3W	1 μW - 3W
Power Scales	2W to 20 μW and dBm	3W to 3 μW and dBm	3W to 3 μW and dBm
Calibration Uncertainty nm	$\pm 1.1\%$ 430-1000 ^(b)	$\pm 1.1\%$ 430-1000 ^(b)	$\pm 2.4\%$ 800-1430 ^(b)
% Error vs Wavelength nm	± 7 220-250 ± 5 250-420 ± 4 420-950 ± 7 950-1100	± 5 350 -1000 ± 10 1000-1100	± 5
Linearity with Power $\pm\%$	1	1	1
Damage Threshold kW/cm ²	1 on integrating sphere surface	0.2 on integrating sphere surface	0.2 on integrating sphere surface
Maximum Pulse Energy μJ	600	100	500
Power Noise Level nW	20	20	20
Response Time with Meter s	0.2	0.2	0.2
Maximum Beam Divergence	± 40 degrees for fan shaped beam, ± 50 degrees for circular beam	± 40 degrees	± 40 degrees
Sensitivity to Beam Size and Angle	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$
Cooling	convection	convection	convection
Fiber Adapters Available (see page 32)	ST, FC, SMA, SC	ST, FC, SMA ^(a) , SC	ST, FC, SMA ^(a) , SC
Weight kg	0.25	0.6	0.6
Compliance	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS
Version		V1	
Part Number	7Z02484	7Z02404	7Z02403

Notes: (a) One fiber output port available with output = 2E-4 of input power/mm² of fiber area
(b) For calibration uncertainty of wavelengths outside of this range see table on page 24

IS-1-2W



3A-IS / 3A-IS-IRG

