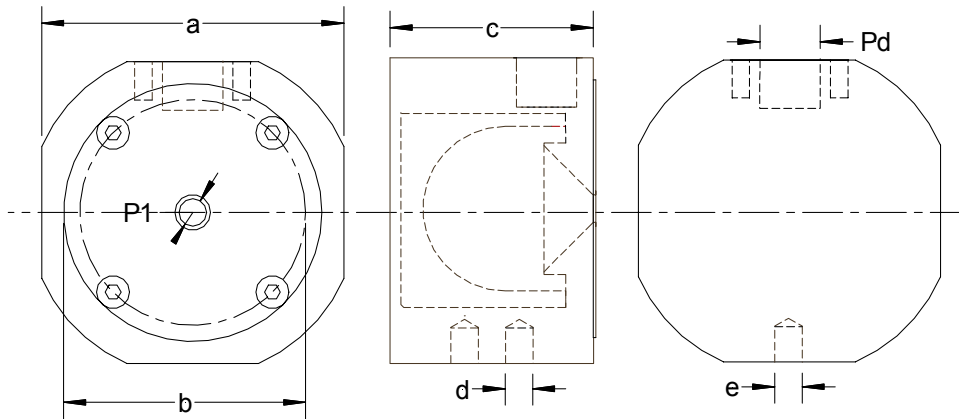


UPK-30-L



UPK-30-L with PD-1101-2 light detector

The UPK-30-L is a compact 30 mm (1.2 in.) diameter integrating sphere with OP.DI.MA. coating. The small diameter and high reflectance of 98 % in the wavelength range from 400 to 1700 nm result in a low attenuation which allows to build high sensitive sphere detectors with small area and therefore low price Si- and InGaAs photodiodes. The unique baffle design combined with the good diffuse reflectivity of ODM98 makes this sphere insensitive against different light incident angles and reduces effects by polarization and re-reflected light. One, alternative two 11-type detectors or UFC fiber connectors can be assembled.

Dimensions (mm):			
a	55	c	37.5
b	41	d	M6 & 1/4"

Ordering Information & Specifications:

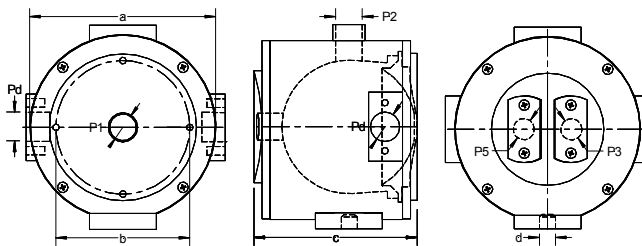
Model	Sphere		Port		Coating**)
	Dia.*)		diameter*)	Plug	
UPK-30-L	30 / 1.2	P1	5 / 0.2	No	ODM98 / 98 / 250-2500
		Pd	1 x11-type	No	
DP-11		Pd	11-type	No	Additional ports for 11type detectors & accessories

*) dimension in mm / in. **) type / reflectance in % / wavelength in nm.

Accessory: PD-11 & TD-11 detectors; UFC-11 fiber adapter

UPK-50-F, UPK-50-L & UPK-50-ULS

UPK-50-F

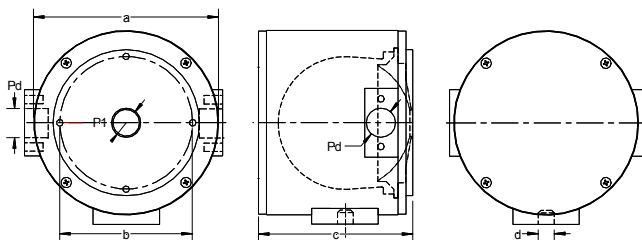


UPK-50-L

UPK-50-ULS



UPK-50-L



The UPK-50 is a very popular compact size integrating sphere for many radiometric and photometric applications requiring sphere mounted integral detectors or diode array spectrometers. The OP.DI.MA. coating is highly reflective from 250 nm to 2500 nm. In combination with its small 50 mm (2 in) diameter a low attenuation factor results which makes the UPK-50 series ideal for sensitive measurement applications. The nearly ideal lambertian reflectance characteristic of OP.DI.MA. offers best light distribution by the multiple reflections, which is very important for small diameter spheres.

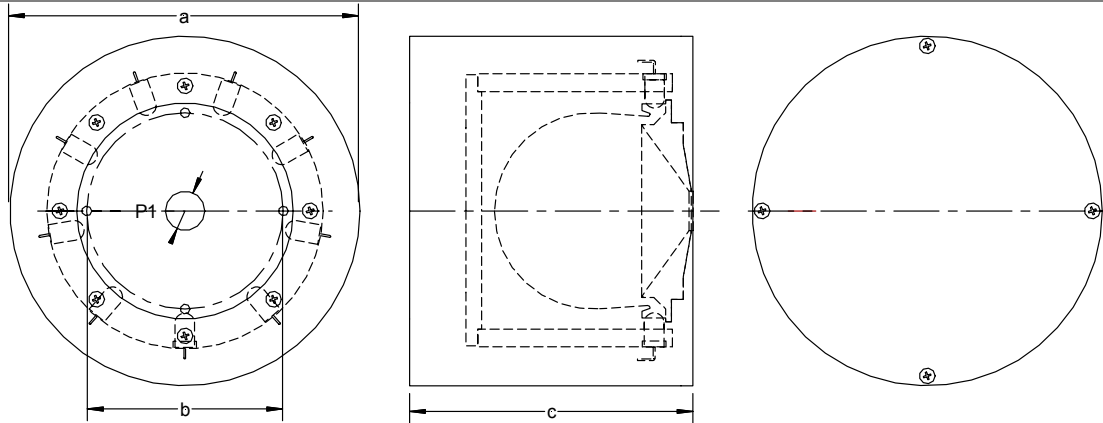
The knife-edge and unique baffle designs plus good diffuse reflectivity enable a large measurement port acceptance angle. Model UPK-50-L is designed to measure the intensity of directional light. One or more detectors, or alternatively fiber optics, can be adapted to the sphere to increase the wavelength range. Model UPK-50-F is a more flexible version for reflectance and transmittance measurements. One or more detectors, or alternatively fibers, can be adapted to the sphere to increase its wavelength range. Model UPK-50-ULS is designed for uniform light source set-ups using multiple standard LEDs.

Dimensions (mm):			
a	70	c	61
b	50	d	M6

UP Series

UPK-50-F,

UPK-50-ULS



Ordering Information & Specifications:					
Model	Sphere Dia.*)	Port diameter*)		Plug	Coating**)
UPK-50-L	50 / 2	P1	10 / 0.4	No	ODM98 98 / 250-2500
		Pd	1 x 11-type	No	
UPK-50-F	50 / 2	P1	10 / 0.4	No	
		P2/3/5	10 / 0.4	Yes	
		Pd	1 x 11-type	No	
UPK-50-ULS	50 / 2	P1	10 / 0.4	No	
		PLED	8 x 5 mm	No	
DP-11 (only -L & -F)		Pd	1 x 5 mm	No	Additional ports for 11 type detectors & accessories

Dimensions (mm):	
a	89
b	50
c	72

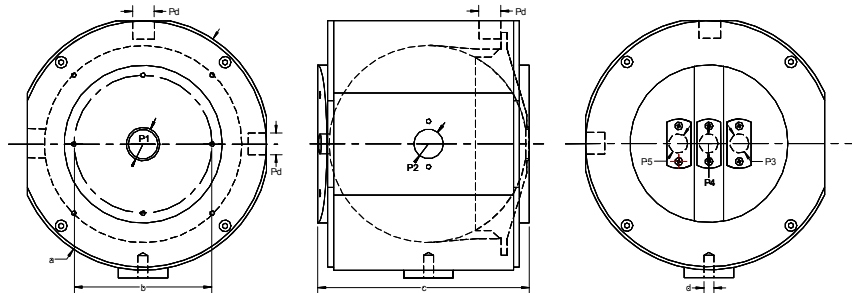
*) dimensions in mm / in. **) type/reflectance %/wavelength nm

Accessory (only -L & -F): PD-11 & TD-11 detectors; UFC-11 fiber adapter

UPK-100-F & UPK-100-L



UPK-100-F



Dimensions (mm):			
a	128	c	107
b	70	d	M6

The UPK-100 is a 100 mm (4 in) diameter sphere made from machined OP.DI.MA. Its compact size and high reflectance from 250 nm to 2500 nm results in low attenuation making it suitable for sensitive measurement applications. A knife-edge and unique baffle design plus good diffuse reflectivity enable a large acceptance angle measurement port Model UPK-100-L is designed to measure the intensity of directional light.

Model UPK-100-F is a more flexible version for intensity, reflectance and transmittance measurements. Optional detectors or fibers can be added to both sphere models.

Ordering Information & Specifications					
Model	Sphere Dia.*)	Port diameter*)		Plug	Coating**)
UPK-100-L ***)	100 / 4	P1	15 / 0.6	No	ODM98 / 98 / 250-2500
		Pd	1 x 11-type	No	
UPK-100-F	100 / 4	P1	15 / 0.6	No	
		P2	15 / 0.6	Yes	
		P3/4/5	10 / 0.4	Yes	
		Pd	1 x 11-type	No	
DP-11		Pd	1 x 11 type	No	Additional detector port

*) dimensions in mm / in. **) type/reflectance %/wavelength nm ***) as UPK-100-F without P2,P3, P4, P5

Accessory Components PD-11 & TD-11 detectors; UFC-11 fiber adapter