

HD 1800 l/mm @ 840 nm

VPH transmission grating for OCT



PERFORMANCE BENEFITS

Excellent 1st order diffraction efficiency for greater sensitivity and faster scan rates

Superior uniformity over the full spectral band for better SNR and axial resolution

Minimal polarization sensitivity across wavelength

Low wavefront error to reduce roll-off

Robust, durable optic for easy cleaning & handling

Enables compact, transmissive optical designs

Maximize your sensitivity and scan speed with our patented grating designs

The clearest, deepest spectral domain optical coherence tomography (SD-OCT) images require an optical design that covers a broad bandwidth with maximum signal to noise ratio (SNR). That's why we developed our OCT gratings to have high efficiency and low polarization dependence across the full operating wavelength range. Choose from our range of stock gratings, or draw on our expertise in OCT to design your ideal grating. Place our VPH gratings at the heart of your OCT spectrometer or system and achieve clearer images, faster.

Because light is precious

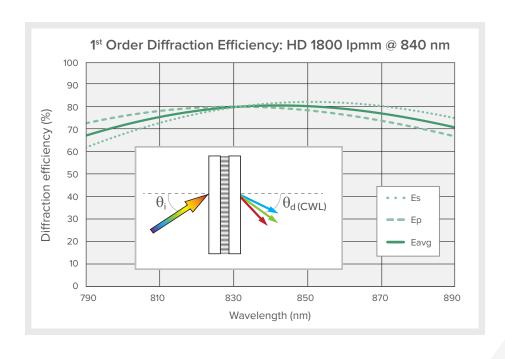


VPH Grating: HD 1800 l/mm @ 840 nm

STANDARD PRODUCT SPECIFICATIONS & OPTIONS

Standard sizes and specifications for this grating are shown below. Don't see what you need? Let our expert staff design and build a custom grating to meet the needs of your specific application and optical design.

	WP-HD1800/ 840-25.4	WP-HD1800/ 840-30	WP-HD1800/ 840-50.8	WP-HD1800/ 840-20x30	WP-HD1800/ 840-35X45
Center Wavelength (CWL)	840 nm				
Spatial Frequency (lines/mm)	1800 l/mm +0/-0.5 l/mm				
Operating Range	790 - 890 nm				
Angle of Incidence (θ _i)	49.1° @ 840 nm				
AR coating	< 0.5% reflection, 790 - 890 nm				
Surface Quality	60-40 scratch-dig				
Diffracted Wavefront Error	< №5 rms @ 633 nm over 1" Ø				
Substrate	BK7	BK7	B270i	B270i	BK7
Chamfers	0.25-0.75 face width				
Size	Ø=25.4 mm	Ø=30 mm	Ø=50.8 mm	20 x 30 mm	35 x 45 mm
Size Tolerance	+0/-0.15 mm	+0/-0.15 mm	+0/-0.15 mm	+0/-0.15 mm	+0/-0.15 mm
Thickness	3.00 ± 0.25 mm	6.00 ± 0.25 mm	6.00 ± 0.25 mm	4.00 ± 0.25 mm	6.00 ± 0.25 mm
Clear Aperture	20 mm	24 mm	45 mm	15 x 25 mm	30 x 40 mm



Customization available upon request

WP

WP-PS_HD1800lpmm-840nm_14Sep20