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# TECHSPEC 1300nm CWL, 50mm Dia. Hard Coated OD 4.0 50nm Bandpass Filter

Stock **#85-910** **3 In Stock**

Additional Bandwidths

- 1 + **£692.00**

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| Volume Pricing | |
|---|---|
| Qty 1-5 | **£692.00** each |
| Qty 6-25 | **£553.60** each |
| Qty 26-49 | **£519.00** each |
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Prices shown are exclusive of VAT/local taxes

Product Downloads

## General

**Type:**
Bandpass Filter

## Physical & Mechanical Properties

**Diameter (mm):**
50.00 +0.0/-0.1

**Clear Aperture CA (mm):**
45.0

**Construction:**
Mounted in Black Anodized Ring

**Physical Durability:**
Adhesion per MIL-PRF-13830B, Section C.4.5.12
Moderate abrasion per MIL-PRF-13830B, Section C.4.5.11
Cleaning per MIL-C-48497A Section 4.5.4.2

**Substrate Thickness (mm):**
3.5 ±0.5

## Optical Properties

**Angle of Incidence (°):**
0

**Bandwidth (nm):**
45

**Optical Density OD (Average):**
≥4.0

**Center Wavelength CWL (nm):**
1,300.00

**Full Width-Half Max FWHM (nm):**
50.00

**Substrate:**
Optical Glass

**Minimum Transmission (%):**
≥90

**Coating:**
Hard Coated

**Surface Quality:**
80-50

**Blocking Wavelength Range (nm):**
200 - 1800

## Threading & Mounting

**Mount Thickness (mm):**
5.0 ±0.1

## Environmental & Durability Factors

**Environmental Durability:**
Humidity per MIL-STD-810H, Section 507.6
Temperature per MIL-STD-810H, Section 501.7 and 502.7

## Regulatory Compliance

**RoHS 2015:**
Compliant

**Certificate of Conformance:**
View

**Reach 247:**
Compliant

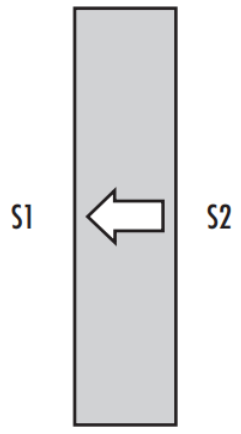
# Product Details

- High Transmission, Deep Blocking
- Broad Bandwidths Ideal for Imaging Applications
- Available in VIS and IR Center Wavelengths
- **Hard Coated OD 4.0 10nm** and **25nm** Bandpass Filters Also Available

TECHSPEC® Hard Coated OD 4.0 50nm Bandpass Filters are ideal for imaging applications, including machine vision inspection, fluorescence microscopy, and a variety of biotech instrumentation. These bandpass filters eliminate unwanted background noise and enhance the signal-to-noise ratio within imaging applications. Unlike traditional filters, these hard coated filters are fabricated using only a single substrate. TECHSPEC® Hard Coated OD 4.0 50nm Bandpass Filters offer deeper blocking, higher transmission, and steeper slopes than traditional coated filters. Hard Coated OD 4.0 **10nm** and **25nm** are also available.

**Note:** These filters are optimized for high spectral performance rather than high Laser Induced Damage Thresholds (LIDT). A typical LIDT for these filters is 1 J/cm$^2$ @ 532nm, 10ns. Please **contact us** if you require a filter with a higher LIDT value.

# Technical Information




*All mounted TECHSPEC® Optical Filters have an arrow on the side of the mount that points to the filter-coated surface for quick reference. Filter oriented such that arrow points to filter coated surface S1. Anti-reflective (AR) coating is applied to S2.*

## Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**

## Compatible Mounts