



# Astronomy

Filters & Sets



# Highlights

## Astronomy Highlights

SBIG, QSI and FLI sizes in stock

Extremely durable coatings withstand humidity changes and extreme temperature fluxes and remain spectrally accurate in CWL and band pass adherence

No reflections leading to image distortions or 'back reflections'

### Other Offerings

H-Beta, IR Long Pass Filters

Capable of manufacturing large filters for large detectors: 50mm x 50mm, 65mm up to 76.2mm and 101.6mm square

All filters manufactured in Vermont

*Andromeda Galaxy (M31) captured with LRGB filters and Orion Nebula Messier 42 (M42) captured with H- $\alpha$ , SII and OIII narrowband filters from Chroma. Images courtesy David Snay, West Boylston, MA*



# Astronomy

## Filters & Sets

Chroma Technology is an employee-owned company. We specialize in the design and manufacture of sputtered optical filters and coatings for applications that require the greatest precision in color separation, optical quality and signal purity. Our astronomical filters are used worldwide in research and amateur applications. We are as comfortable designing and manufacturing custom filters as we are our catalog items.



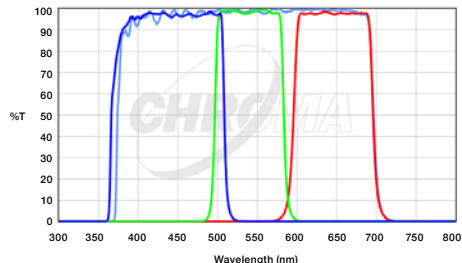
# Astrophotography

## Filters & Sets

### Common Specifications

Durable sputter coatings  
 Parallelism: <30 arcsec  
 Thickness: 3.0 +/-0.05mm

Filters designed for use with  
 CCD and for f/4.0 or slower  
 Transmitted wavefront better  
 than 0.25 waves/inch



### LRGB Filter Sets

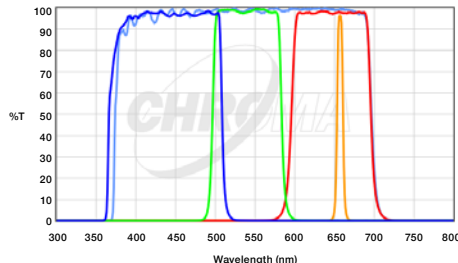
Chroma's complete LRGB filter sets include four individual filters—luminance, red, green, and blue—and are available in the listed configurations:

#### Mounted Sets

- LRGB-1.25" .....\$475.00  
in a 1.25" threaded ring
- LRGB-2" .....\$900.00  
in a 2" M48 threaded ring

#### Unmounted Sets

- LRGB-31 .....\$495.00  
31mm diameter
- LRGB-36 .....\$595.00  
36mm diameter
- LRGB-50 .....\$875.00  
50mm diameter
- LRGB-50S .....\$1,085.00  
50mm x 50mm square
- LRGB-65S .....\$2,595.00  
65mm x 65mm square



### H-αLRGB Filter Sets

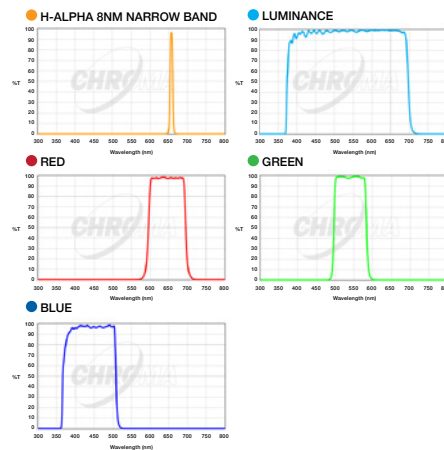
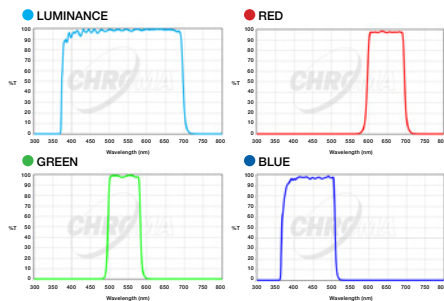
Chroma's complete H-αLRGB filter sets include five individual filters—H-Alpha, luminance, red, green, and blue—and are available in the listed configurations:

#### Mounted Sets

- H-αLRGB-1.25" .....\$725.00  
in a 1.25" threaded ring
- H-αLRGB-2" .....\$1,350.00  
in a 2" M48 threaded ring

#### Unmounted Sets

- H-αLRGB-31 .....\$755.00  
31mm diameter
- H-αLRGB-36 .....\$925.00  
36mm diameter
- H-αLRGB-50 .....\$1,305.00  
50mm diameter
- H-αLRGB-50S .....\$1,525.00  
50mm x 50mm square
- H-αLRGB-65S .....\$3,495.00  
65mm x 65mm square



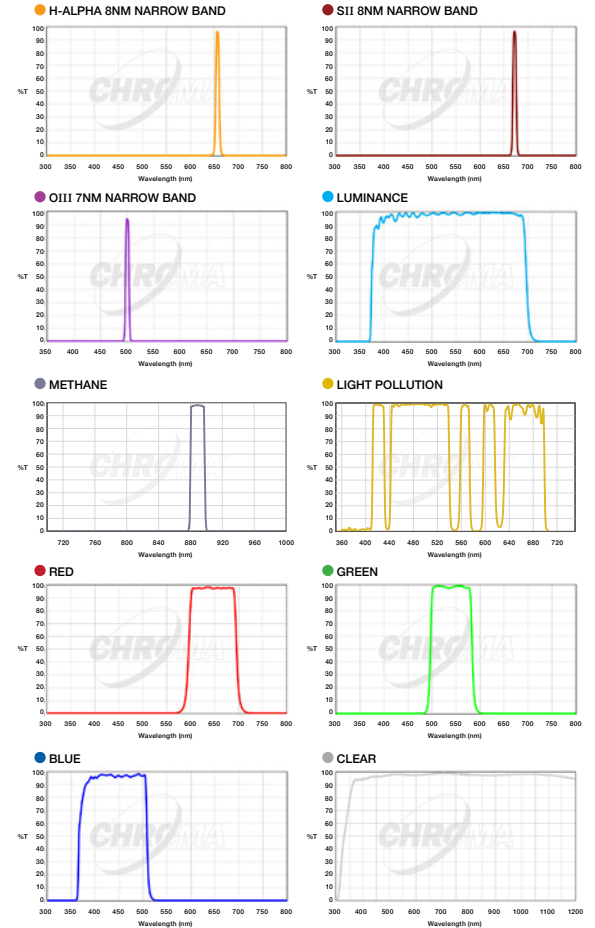
Call +1-800-824-7662 for information on other sizes or other filter designs.

# Individual Filters

|   | Mounted                |                         | Unmounted     |               |               |                |                |
|---|------------------------|-------------------------|---------------|---------------|---------------|----------------|----------------|
|   | IN 1.25" THREADED RING | IN 2" M48 THREADED RING | 31MM DIAMETER | 36MM DIAMETER | 50MM DIAMETER | 50X50MM SQUARE | 65X65MM SQUARE |
| <p><b>H-Alpha 8nm Narrow Band</b><br/>T: ≥ 94%@656.3nm, FWHM = 7.7nm</p>  | \$265                  | \$475                   | \$275         | \$355         | \$455         | \$465          | \$915          |
| <p><b>SII 8nm Narrow Band</b><br/>T: ≥ 94%@672.4nm, FWHM = 7.7nm</p>  | \$265                  | \$475                   | \$275         | \$355         | \$455         | \$465          | \$915          |
| <p><b>OIII 7nm Narrow Band</b><br/>T: ≥ 94%@500.7nm, FWHM = 7.1nm</p>   | \$265                  | \$475                   | \$275         | \$355         | \$455         | \$465          | \$915          |
| <p><b>Jovian Methane</b><br/>T: ≥ 96%@889nm, FWHM = 18nm</p>  | \$265                  | \$475                   | \$275         | \$355         | \$455         | \$465          | \$915          |
| <p><b>LoGlow Light Pollution Filter</b><br/>T: ≥ 94% avg. across visible passbands;<br/>Blocking ≥ OD1.4@ metal-halide and vapor lamp lines</p> | \$195                  | \$425                   | \$225         | \$285         | \$385         | \$425          | \$895          |
| <p><b>Luminance</b><br/>T: ≥ 92% avg., 86% min. 385-684nm</p>   | \$125                  | \$250                   | \$130         | \$155         | \$230         | \$285          | \$695          |
| <p><b>Red</b><br/>T: ≥ 92% avg., 88% min. 603-684nm</p>   | \$125                  | \$250                   | \$130         | \$155         | \$230         | \$285          | \$695          |
| <p><b>Green</b><br/>T: ≥ 92% avg., 88% min. 500-575nm</p>   | \$125                  | \$250                   | \$130         | \$155         | \$230         | \$285          | \$695          |
| <p><b>Blue</b><br/>T: ≥ 92% avg., 88% min. 380-500nm</p>  | \$125                  | \$250                   | \$130         | \$155         | \$230         | \$285          | \$695          |
| <p><b>Clear</b><br/>T: ≥ 97% avg., 94% min. 380-1000nm</p>  | \$85                   | \$185                   | \$90          | \$110         | \$165         | \$185          | \$375          |

\* H-Alpha filters are not for solar observation. All sizes are in mm. 27.06 filters are available in 31.75mm threaded ring at \$10/filter.

## Typical Spectral Performance



# Photometry

## Filters & Sets

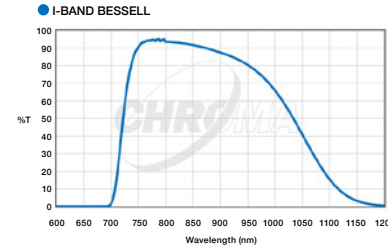
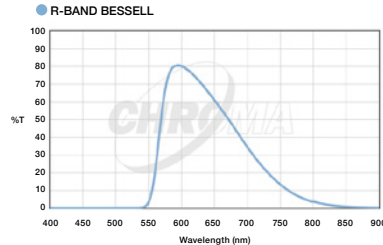
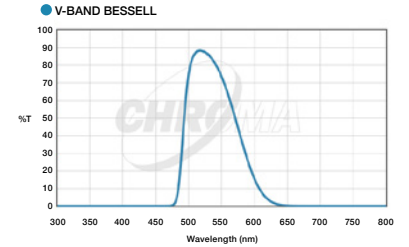
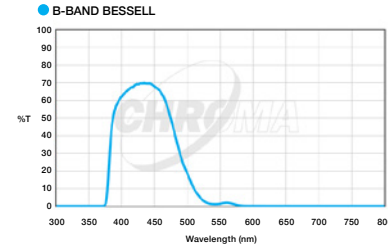
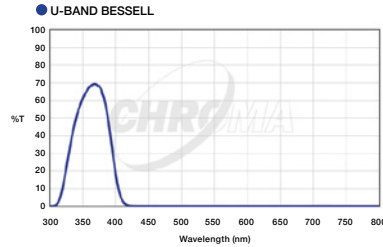
### Common Specifications

Durable, anti-reflective coatings on both exterior surfaces over applicable transmission range

Thickness: 4.9 +/-0.05mm, parfocal +/-0.2mm

### Individual Filters

|                             | Unmounted     |               |                |
|-----------------------------|---------------|---------------|----------------|
|                             | 27MM DIAMETER | 50MM DIAMETER | 50X50MM SQUARE |
| ● U-Band Bessell<br>363/63  | \$137         | \$275         | \$275          |
| ● B-Band Bessell<br>433/100 | \$137         | \$275         | \$275          |
| ● V-Band Bessell<br>533/85  | \$110         | \$220         | \$220          |
| ● R-Band Bessell<br>628/124 | \$110         | \$220         | \$220          |
| ● I-Band Bessell<br>875/300 | \$110         | \$220         | \$220          |

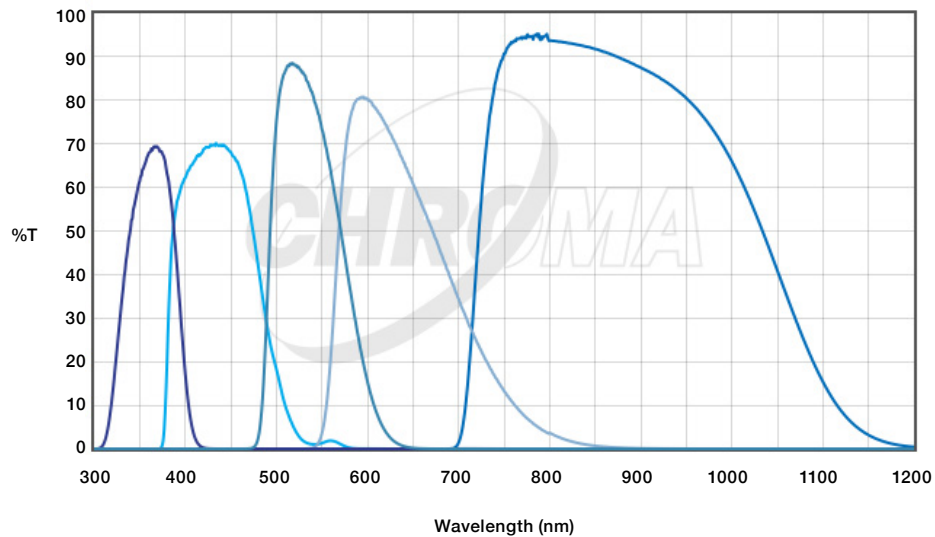


Call +1-800-824-7662 for information on other sizes or other filter designs.



## UBVRI Filter Sets

Call for full set pricing: +1-800-824-7662



# Capabilities of note

### Wavelength Range

200 – 3000nm

### Analysis

T% wavefront measurement <370 – >1000nm

Spectral evaluations at LN2

Spectral evaluations to 3200nm

### Manufacturing

Grind and Polish to < 0.25 waves T%: 632.8nm

### Coating Processes

E-Beam / IAD Oxides

Sputtered Oxides

Hard Fluorides (E-Beam)

### Design

Custom filters

Modeling spectral shift at angle and/or f/#

Halo minimization

### Key Filter Product Lines

Low-light fluorescence microscopy  
and cytometry

Spectrographic imaging in optical microscopy

Laser-based confocal and  
multi-photon instrumentation

Raman spectroscopy

### **About Chroma**

Chroma was organized in 1991 by several talented individuals who wanted to create a working environment entirely different from the typical corporate structure. Chroma Technology is 100% employee-owned. All manufacturing occurs in the United States, with worldwide distribution and sales support.

### **Easy Online Ordering**

Visit [www.chroma.com](http://www.chroma.com) to order online.

### **Ordering by Phone**

Call +1-802-428-2500 or +1-800-824-7662

### **Lifetime Warranty**

#### **Terms:**

Net 30 days

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