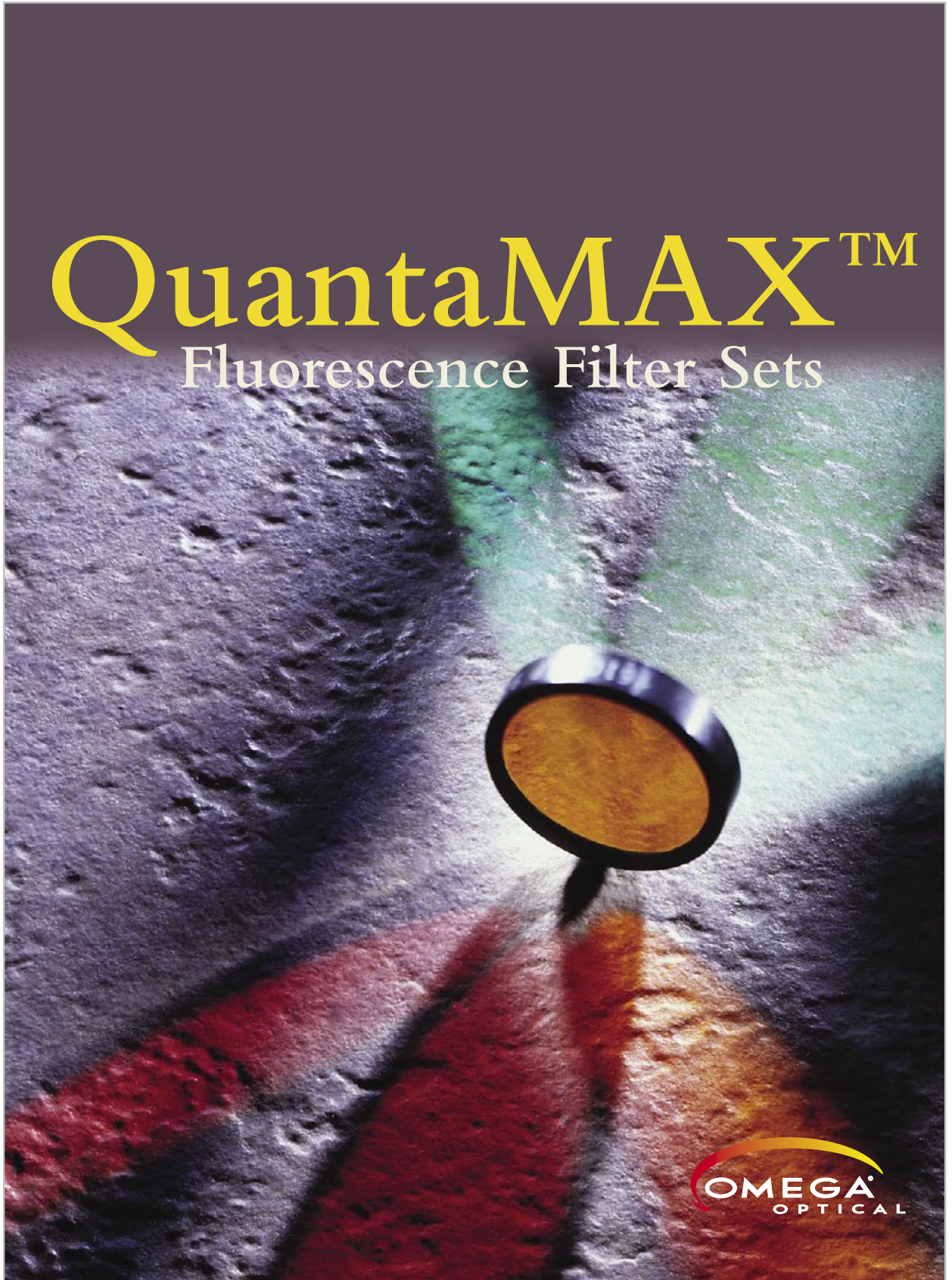


# QuantaMAX™

## Fluorescence Filter Sets



04/22 / V01 / BG-HF / omega/quantamax

1

**Germany and Other Countries**  
Laser Components Germany GmbH  
Tel: +49 8142 2864-0  
Fax: +49 8142 2864-11  
info@lasercomponents.com  
[www.lasercomponents.com](http://www.lasercomponents.com)

**France**  
Laser Components S.A.S.  
Tel: +33 1 39 59 52 25  
Fax: +33 1 39 59 53 50  
info@lasercomponents.fr  
[www.lasercomponents.fr](http://www.lasercomponents.fr)

**United Kingdom**  
Laser Components (UK) Ltd.  
Tel: +44 1245 491 499  
Fax: +44 1245 491 801  
info@lasercomponents.co.uk  
[www.lasercomponents.co.uk](http://www.lasercomponents.co.uk)

**Nordic Countries**  
Laser Components Nordic AB  
Tel: +46 31 703 71 73  
Fax: +46 31 703 71 01  
info@lasercomponents.se  
[www.lasercomponents.se](http://www.lasercomponents.se)

**New!****QuantaMAX™ Sets****Application**

Low-light and live cell applications

**Design Features**

High signal-to-noise sets manufactured with EP hard coatings in an assembly which protects critical coatings.

**Excitation Filters**

EP durable coatings with deep near band and out-of-band blocking for high signal-to-noise.

**Dichroic Beamsplitters**

Hard-surface and AR coatings

**Emission Filters**

EP durable coatings with deep near band and out-of-band blocking for high signal-to-noise.

Omega Optical's new QuantaMAX microscopy filter sets are manufactured using state-of-the-art Energetic Process coating technology for high durability, and low temperature sensitivity. The highly stable, hard-surface coatings are further protected from mechanical abrasion in a multi-substrate, coating-safe assembly, resulting in long filter life. These extremely high throughput sets provide excellent results in all fluorescence microscopy applications including confocal, multi-photon, and live cell experiments. They are especially effective in applications where photons are scarce and exposure times are critical.

**HIGH THROUGHPUT—SIGNAL-TO-NOISE**

QuantaMAX filter set designs consider not just peak filter transmission and fluorophore probability curves, but also optimized band placement in relation to light sources, and blocking in relation to detector sensitivity. In addition, multiple redundant coatings are used to enhance the steep slopes and deep blocking of excitation and emission filters, ensuring extremely low crosstalk and extremely high signal-to-noise.

**EP COATINGS—STABLE**

State-of-the-art Energetic Process coatings produce filters which are spectrally stable,

mechanically robust, and insensitive to moisture. The coatings in QuantaMAX sets are dense and hydrophobic, resulting in stability and long filter life in the harshest environments.

**COATING-SAFE ASSEMBLY—RUGGED**

While EP surface coatings are hard enough to be exposed, they can still be accidentally damaged, resulting in filter failure. To prevent this from happening these sets utilize a coating-safe assembly, which is a multi-substrate, air-spaced design that protects the critical coatings from the dangers of handling and mechanical abrasion in routine lab usage.

**ZERO PIXEL SHIFT (ZPS™)—RESOLUTION**

Zero pixel shift is standard in these high performance sets. The multi-substrate construction provides protection from mechanical abrasion while maintaining the high wavefront integrity required in imaging applications.

**COLOR SPACE—BRIGHT**

High throughput is dependent on more than just fluorophore absorption and emission spectra, as all photons are not equal. These filter sets utilize "color space" designs to capture maximum "color energy". Band placement is also optimized for specific light sources and detectors.

**Features**

- High Throughput
- Steep Slopes
- Deep Blocking
- Hard Surface Coatings
- Coating-Safe Assembly
- Long Filter Lifetime
- Photon Maximizing
- Light Source Optimized
- Zero Pixel Shift (ZPS™)

Set	Fluorophores	Light Sources	Components	
			Type	Part #/Description
<b>QMAX-Blue</b>	BFP, Alexa 350, DAPI, Hoechst 33342 & 33258	Hg, Xe, Ar Laser	Exciter Dichroic Emitter	QMAX/EX 355-405 QMAX/DI 410LP QMAX/EM 420-480
<b>QMAX-Green</b>	EGFP, Alexa 488, CY 2, FITC	Xe, Ar 457/488	Exciter Dichroic Emitter	QMAX/EX 450-490 QMAX/DI 500LP QMAX/EM 510-560
<b>QMAX-Yellow</b>	DsRed 2, Alexa 546 & 555, CY 3, Rhodamine 2, TRITC	Xe, Hg, HeNe 543, Green LED	Exciter Dichroic Emitter	QMAX/EX 510-550 QMAX/DI 560LP QMAX/EM 570-600
<b>QMAX-Red</b>	Hc Red, Alexa 568 & 594, Mito-Tracker Red	Hg, HeNe 543, Ar 568	Exciter Dichroic Emitter	QMAX/EX 530-570 QMAX/DI 580LP QMAX/EM 600-650
<b>QMAX-FRed</b>	Alexa 647, CY 5	Xe, HeNe 612/633, Red Diode 635, Krypton 647	Exciter Dichroic Emitter	QMAX/EX 620-650 QMAX/DI 660LP QMAX/EM 670-750