

HLT DIGITAL FILTER SERIES

HIGH LIGHT TRANSMISSION ULTRA SLIM FILTERS

PRO PERFORMANCE FOR HIGH DEFINITION IMAGES



Digital High Light Transmission (HLT) Filter Series is designed especially for discerning user who demands the best available quality optical filter to protect their valuable lens and at the same time offering high quality images.

Resolution of digital images depends on the quality of lenses used on DSLR body. It is therefore essential that the quality of the filter used in front of the lens must be of the highest possible quality in order to maintain the best quality that the DSLR lens had to offer.

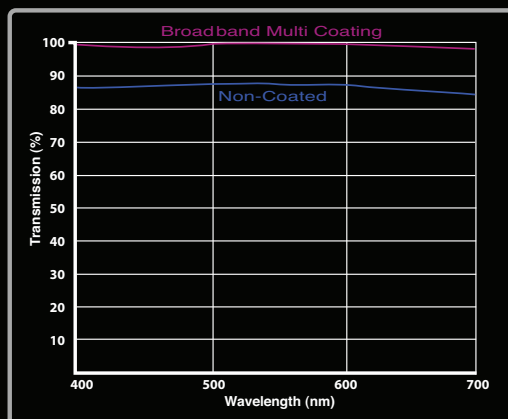
Critical aspects that would affect image resolution are identified and placed in high emphasis in the production of this filter.

OPTICAL CHARACTERISTICS

HIGH GRADE OPTICAL GLASS

The core component in the composition of a quality filter is the type of glass used. Filters within the HLT series incorporate optical grade glass which undergo ground and polishing process to ensure the highest level of picture sharpness that the lens are capable of capturing.

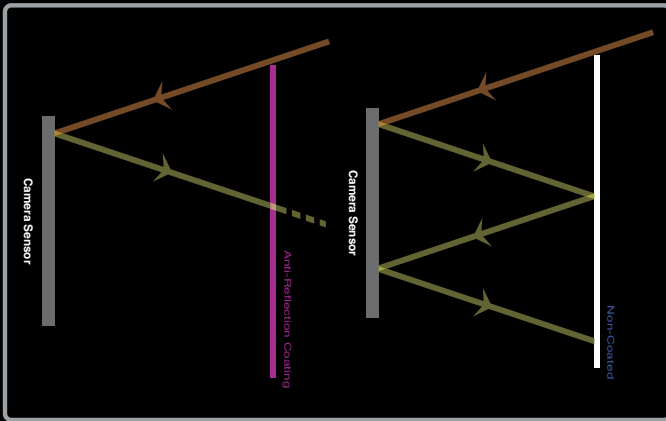
BROADBAND ANTI REFLECTION MULTI COATING



HLT optical glass are treated with broadband anti reflection coating which enable over 99% of available ambience light to pass through a broader visible spectrum from 450nm-650nm*.

*Standard multi-coating allows a narrower spectrum of light to pass through from 500-600nm

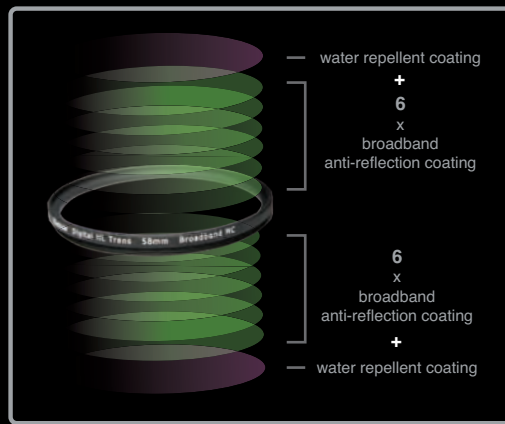
Graphic 1.1: Transmission Light Graph with over 99% of light entrance compared to non-coated glass



Graphic 1.2: Anti-reflection light ray path versus non coated light ray path

6 layers of anti-reflection coating on both sides effectively block out stray light from entering the camera sensor so that the highest clarity of digital images can be taken.

WATER REPELLENT COATING*



Graphic 1.3: 6 layers of broadband anti reflection coating with addition layer of water repellent coating

Additional layer of water repellent coating applied on top of the anti-reflection coating prevent permanent settlement of dust, dirt and water on glass surface.

This additional layer of coating repels oil and water by consolidating liquids into large droplets for fast removal.

*Only available for HLT Pro UV Lens Protector

GLASS MANUFACTURING PROCESS



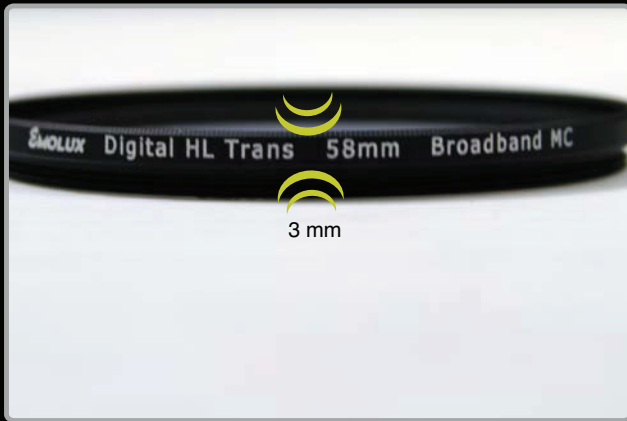
Optical glass are grounded and polished to achieve an ultra thin thickness of 1.4mm.

Internal reflections are further minimized by apply black ink coating surrounding the glass edges.

- ◆ Optical glass ground and polished to 1.4mm
- ◆ Black ink coating process applied on glass edges

FILTER FRAME CHARACTERISTICS

ULTRA THIN FRAME



Precise CNC is used to machine the ultra thin frame to achieve a ultra thin height of 3mm. This enables the filter to be lighter and also suitable for usage on wide angle lens without vignette (darken of 4 corners).

ANTI REFLECTION FINISHING



CNC machined ultra thin filter rings are treated with anti-reflection black anodizing process to prevent unwanted external light reflection from entering the camera sensor.

CAPS & FILTER INSTALLATION



Despite its ultra thin frame, front threads are incorporated at the front frame to enable proper installation of lens protection cap or other special application filters