DB660/850 Dual Bandpass Red + 850 NIR

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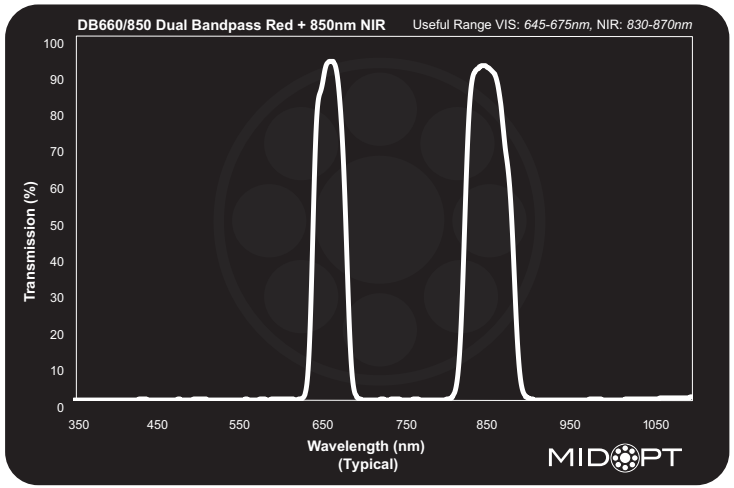

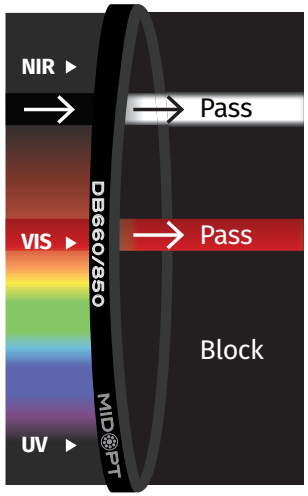

The DB660/850 filter has been designed primarily for NDVI imaging applications. When using a single camera, incorporation of this filter allows reflected red light (660nm) to be captured in the camera sensor's red channel and reflected near- infrared light (850nm) to be captured in the sensor's blue channel (the green channel is not used). Even when using an inexpensive consumer camera (that has first had its IR blocking filter removed), this easy separation then makes it possible to post-process the red and blue channels for NDVI by performing the calculation: NDVI = (blue – red) / (blue + red). Healthy vegetation will absorb (not reflect) red light and strongly reflect near-infrared light. Thus this information can then be used to apply a false color gradient to images to better highlight the contrast between regions of healthy vegetation vs. areas with stressed/diseased or no vegetation.

Useful Range: 645-675nm, 830-870nm

FWHM: 40nm, 50nm

Peak Transmission: ≥90%

Surface Quality: 40/20

DB660/850 Data Points (Typical)

Wavelength (nm)	Transmission (%)	Wavelength (nm)	Transmission (%)	Wavelength (nm)	Transmission (%)	Wavelength (nm)	Transmission (%)
1100	0.93	910	0.10	720	0.13	530	0.05
1090	0.53	900	0.63	710	0.05	520	0.01
1080	0.52	890	8.93	700	0.11	510	0.16
1070	0.60	880	53.23	690	2.51	500	0.37
1060	0.45	870	76.07	680	46.43	490	0.04
1050	0.27	860	89.75	670	88.14	480	0.12
1040	0.28	850	91.83	660	93.25	470	0.06
1030	0.43	840	91.31	650	85.67	460	0.01
1020	0.21	830	81.92	640	48.09	450	0.00
1010	0.06	820	23.32	630	1.53	440	0.11
1000	0.03	810	1.24	620	0.14	430	0.17
990	0.13	800	0.12	610	0.22	420	0.05
980	0.38	790	0.03	600	0.26	410	0.10
970	0.04	780	0.03	590	0.16	400	0.03
960	0.00	770	0.11	580	0.18	390	0.04
950	-0.03	760	0.14	570	0.06	380	0.03
940	-0.01	750	0.08	560	0.15	370	0.00
930	-0.01	740	0.21	550	0.06	360	0.00
920	-0.01	730	0.13	540	0.11	350	0.00

**Due to continuous product improvement, specifications are subject to change without notice. For the most up-to-date information visit www.midopt.com*

Filter Mount & Size Options

Threaded Mount

For lenses with filter threads; Mount Sizes M13.25 - M82

Part #	*Thread Dia x Pitch*	*Part #*	*Thread Dia x Pitch*
DB660/850-13.25	M13.25 x P0.5	**DB660/850-43**	M43 x P0.75
DB660/850-22.5	M22.5 x P0.5	**DB660/850-46**	M46 x P0.75
DB660/850-25.4	M25.4 x P32TPI	**DB660/850-48**	M46 x P0.75
DB660/850-25.5	M25.5 x P0.5	**DB660/850-49**	M49 x P0.75
DB660/850-27	M27 x P0.5	**DB660/850-52**	M52 x P0.75
DB660/850-30.5	M30.5 x P0.5	**DB660/850-55**	M55 x P0.75
DB660/850-34	M34 x P0.5	**DB660/850-58**	M58 x P0.75
DB660/850-35.5	M35.5 x P0.5	**DB660/850-62**	M62 x P0.75
DB660/850-37	M37 x P0.75	**DB660/850-67**	M67 x P0.75
DB660/850-37.5	M37.5 x P0.5	**DB660/850-72**	M72 x P0.75
DB660/850-39	M39 x P0.5	**DB660/850-77**	M77 x P0.75
DB660/850-40.5	M40 x P0.5	**DB660/850-82**	M82 x P0.75

25.4™ C-Mount

Threads between lens and sensor

Part #: DB660/850-**25.4**

Slip Mount

- Designed for lenses without filter threads, varifocal and wide-angle lenses
- Includes locking set screws to secure adapter to lens

Create Part #

Use "S" and add the outside diameter of lens in mm (ex: 43mm)

*Example: DB660/850-**S43***

Unmounted

Custom shapes & sizes available

Create Part #

CIRCLE: Use "D" and add diameter in mm (ex: 19mm)
*Example: DB660/850-**D19***

RECTANGLE: Use "R" and add length in mm (ex: 30mm) x width in mm (ex: 15mm)
*Example: DB660/850-**R30x15***

SQUARE: Use "R" and add side measurement in mm (ex: 15mm)
*Example: DB660/850-**R15***

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