

## VIDEO SPECTRAL COMPARATOR

# REGULA 4306F



The device is intended for advanced authenticity verification of passports, ID cards, travel documents, passport stamps, banknotes, driver's licenses, vehicle registration certificates and other vehicle related documents, signatures and handwritten records, paintings, revenue stamps and other security documents.

LIGHT SOURCES				
Incident	white			
	ultraviolet	UVA LED – 395 nm		
		UVA LED – 365 nm		
		UVB LED - 313 nm		
		UVC LED - 254 nm		
	infrared	700 nm		
		780 nm		
		850 nm		
		950 nm		
Oblique (height adjustable)	2×white (left and right)			
	2×infrared 850 nm (left and right)			
For 3D visualization	white			
	infrared 850 nm			
Transmitted	white			
	infrared 860 nm			
	ultraviolet 365 nm			
	spot	white		
		infrared 850 nm		
Coaxial white				
For OVD visualization	horizontal: 31 LEDs			
	vertical: 16 LEDs			
High-intensity LEDs for IR luminescence	Violet – 395 nm			
	Violet – 420 nm			
	Royal Blue – 450 nm			
	Blue – 470 nm			
	Cyan - 505 nm			
	Green - 530 nm			
	Amber – 590 nm			
	Red-orange – 615 nm			
	Red – 635 nm			
	Deep red – 660 nm			

Far red	-	700	nn

Far red - 735 nm

High-intensity, spot, incident white D50

FILTERS		
IR High-pass 550 nm	IR High-pass 730 nm	
IR High-pass 570 nm	IR High-pass 780 nm	
IR High-pass 590 nm	IR High-pass 830 nm	
IR High-pass 610 nm	IR High-pass 850 nm	
IR High-pass 630 nm	IR High-pass 1000 nm	
IR High-pass 645 nm	Visible pass 370–700 nm	
IR High-pass 665 nm	UV cut off 450-700 nm	
IR High-pass 695 nm	Neutral	
IR High-pass 715 nm		

#### **CAMERA**

- Image sensor CMOS BSI
- Sensor resolution 8 Mp
- Frame size 2880×2160 pixels
- Spectral range 340-1100 nm
- Camera zoom in the range of 1-30x with an additional fixed gradation of 60x
- On-screen zoom up to x135 (approx.) on a 32" 4K UHD monitor
- Digital zoom 10x
- Field of view  $-216\times162$  mm ( $\pm5\%$ ), minimum field of view  $3.9\times2.9$  mm ( $\pm5\%$ )
- Field of view 265×199 mm (±5%) (without the object stage)
- Extended field of view 296×222 mm (±5%) (frame size 3216×2412 pixels)
- Possibility to capture A4 document without the object stage
- Hardware based autofocus
- Increased sensitivity mode
- Resolution up to 18900 ppi

#### **SOFTWARE FEATURES**

- 4095 combination of IR Luminescence narrowband high-intensity lights
- IR Luminescence Visualization (auto capture mode and visualization)
- Pseudo-color mode for IR Luminescence
- · Automatic and manual focus, aperture, white balance control
- Manual Aperture control
- Glare free image for incident white and IR 850 nm light sources
- Pulsed 365 nm UV LEDs for differentiating fluorescent and phosphorescent security ink
- High Dynamic Range Imaging (HDRI) technology to generate images for the 365 nm UV light source (HDR images)
- · Multi focus image
- Visualization of retroreflective protection
- Visualization of Invisible Personal Information (IPI™)
- Both vertical and horizontal scanning of Diffractive Optically-Variable Devices/Holograms
- ICAO MRZ reading for ID-1, ID-2, ID-3 documents
- 1D, 2D and QR codes processing
- · Video recording
- Integration with Regula Information Reference Systems
- Letterscreen++ (optionally)
- Saved document format .BMP, .JPG, .TGA, .TIFF
- · Save all camera parameters into the image
- Possibility to restore shooting conditions
- Image post processing
- Super resolution image (24.8 Mp)
- Examination reports
- Acquire RAW images

#### HARDWARE FEATURE

- Integrated RFID Reader
  - ♦ Supported standards ISO 14443: type A and B
  - ♦ Data exchange rate, kBaud 106, 212, 424, 848
- Connection to the PC USB 3.1 Gen 1
- Built in sensors to prevent unintended exposure from UVB and UVC radiation hazard
- Adjustable oblique light system (manual lifting) 45 mm
- Removable object stage for thick document examination
- · Magnetic holders for side flaps
- Three USB ports for external devices (one inside the device, two outside)
- Additional front and back flaps (for work without the object stage)
- Document clamps 2 pcs
- · Mirror for OVI visualization
- Mirror for examination of the document edge
- Dust-proof case (optionally)
- Quartz Glass Holding Plate 200×200×5 mm (L×W×H) (optionally)
- MRZ reading for ID-1, ID-2, ID-3 documents
- RFID reader (ISO 14443) (built-in)
- 1D, 2D and QR codes processing

#### ADDITIONAL EQUIPMENT

- Visualizer of magnetic properties Regula 4197
- Spectral microscope Regula 5006



### **Contact us**

