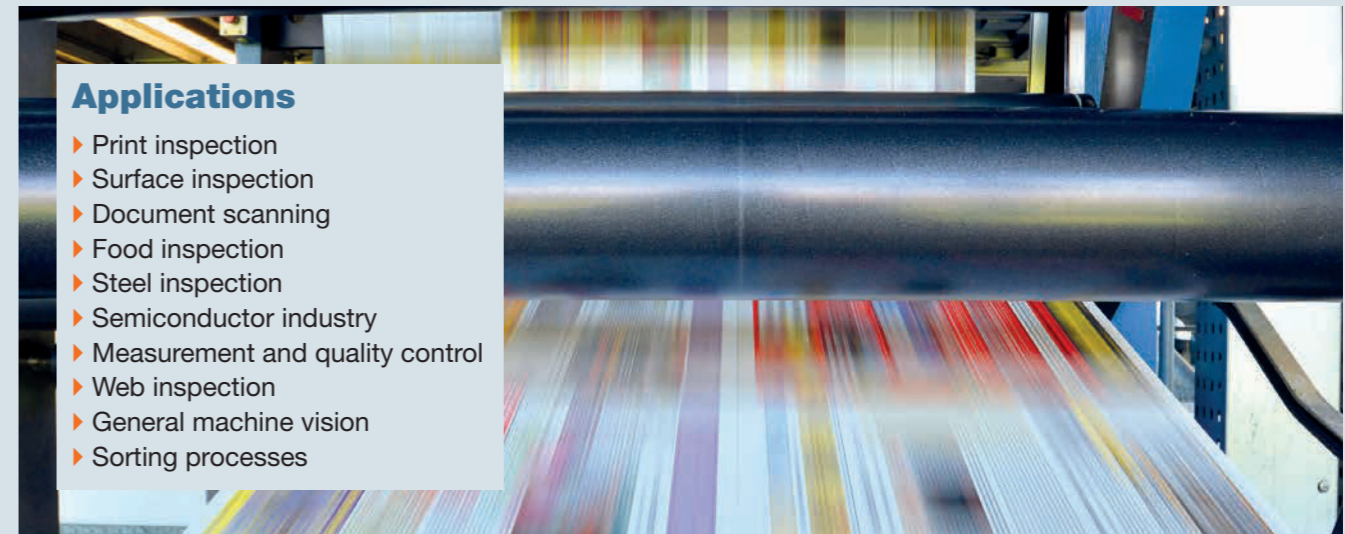


## Corona II LED Line Lighting System

### D Top light and dark field illumination



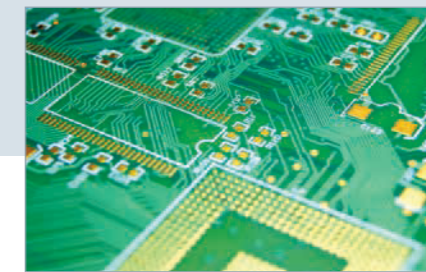
#### Applications

- ▶ Print inspection
- ▶ Surface inspection
- ▶ Document scanning
- ▶ Food inspection
- ▶ Steel inspection
- ▶ Semiconductor industry
- ▶ Measurement and quality control
- ▶ Web inspection
- ▶ General machine vision
- ▶ Sorting processes

CORONA II LED lighting modules feature powerful brightness up to 3,500,000 lux and deliver outstanding homogeneity via a patented reflector design that perfectly shapes light, eliminating chromatic aberrations for unprecedented performance and best in class inspection results.



Food



Electronics



Wood

### Features Top Light/Dark Field Illumination

- ▶ Brightness up to 3,500,000 lux
- ▶ Patented reflector focusing technology
  - ▶ No color aberrations
  - ▶ Higher efficiency
- ▶ Various LED colors
  - ▶ Standard: White, red, green, blue
  - ▶ IR (850 nm or 940 nm)
  - ▶ UV (395 nm - on request)
  - ▶ D50 (standard daylight)
- ▶ Eight lengths up to 1360 mm per single module
- ▶ Three passive cooling options
- ▶ Fan or water cooling available
- ▶ Stackable modules
- ▶ Various screens
  - ▶ Different diffuse screens
  - ▶ Polarizing screen
- ▶ High quality LED binning
- ▶ Advanced thermal management and temperature control
- ▶ Housing design for easy mounting and integration

### LED Control Unit - XLC4

- ▶ External LED controller for flexibility and improved thermal management
- ▶ Four channels up to 1.8 amps per channel
- ▶ RS232, USB, Ethernet and RS485 from PC to the controller
- ▶ Analog or PWM input for external control
- ▶ Temperature stabilization
  - ▶ +/- 1 Kelvin water cooling option
  - ▶ +/- 2 Kelvin fan based cooling
- ▶ Automatic detection of Corona II modules with automatic current limitation
- ▶ Temperature monitoring in the controller and the Corona II modules

### Customized solutions

- Besides standard components Chromasens offers full custom solutions for lighting, camera and scanner solutions.
- ▶ Based on standard Corona II and XLC4 technology
  - ▶ Special housing for the controller available
  - ▶ Special filters or screenings for the LED module available
  - ▶ Full custom designs


#### Specifications:

CORONA II	
Illuminance (white)	Up to 3,500,000 lux @ 60 mm focus (Type A) Min. 1,500,000 lux @ 95 mm focus (Type B) Min. 800,000 lux @ 190 mm focus (Type C) Min. 300,000 lux @ parallel focus (Type D)
Available module length	60 mm (Type A); 95 mm (Type B), 190 mm (Type C); parallel (Type D)
Focal length	60 mm; 95 mm, 190 mm; parallel
LED colors	White (5500 Kelvin or 3500 Kelvin); Red (632 nm); Green (520 nm); Blue (452 nm); IR (850 nm and 940 nm); D50; UV (395 nm on request)
Ports	One LED channel per 170 mm segment I <sup>2</sup> C port for temperature control and identification
Cable length	Standard length 2.5 m or 5 m Up to 15 m or drag chain cable on request
Protection class	IP 54
Operating temperature	0°C to + 70°C (housing temperature)
Certifications	CE, FCC compliant, RoHS


LED CONTROL UNIT - XLC4	
Input voltage	24 Volt DC +/- 10 %; approx. 3.5 amps per used channel for full operation
Output	4 current controlled outputs, from 0.2 amps to 1.8 amps Output power 80 watt per channel and max. output voltage up to 47 volts
Controlling	RS232; RS485, USB, Ethernet Analog input 1-10 Volt and PWM interface
Protection class	IP 40
Operating temperature	0°C to + 50°C (housing temperature)
Certifications	CE, FCC compliant, RoHS

**THE CHROMASENS CORONA II FAMILY:**


Three lighting concepts:



**TOP LIGHT DARK FIELD**



**BRIGHT FIELD BACK LIGHTING**



**TUBE LIGHTING**