![chromasens - Imaging for Professionals]

Corona II LED Line Lighting System

(D) Top light and dark field illumination

Applications

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

Food

Electronics

Wood

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.

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 (365 and 395 nm)
  ▸ 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
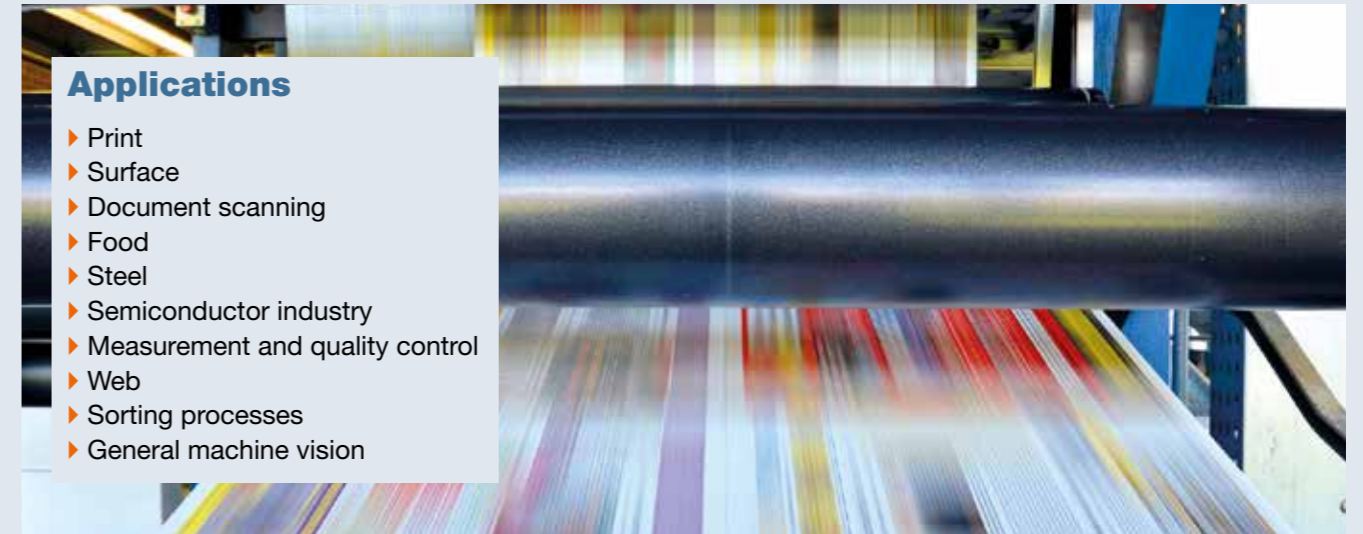▸ Temperature monitoring in the controller and the Corona II modules

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

THE CHROMASENS CORONA II FAMILY:

Four lighting concepts:

(D) TOP LIGHT DARK FIELD

(B) BRIGHT FIELD BACK LIGHTING

(C) COAXIAL LIGHTING

TUBE LIGHTING

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 (365 and 395 nm)
Ports	One LED channel per 170 mm segment I²C 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