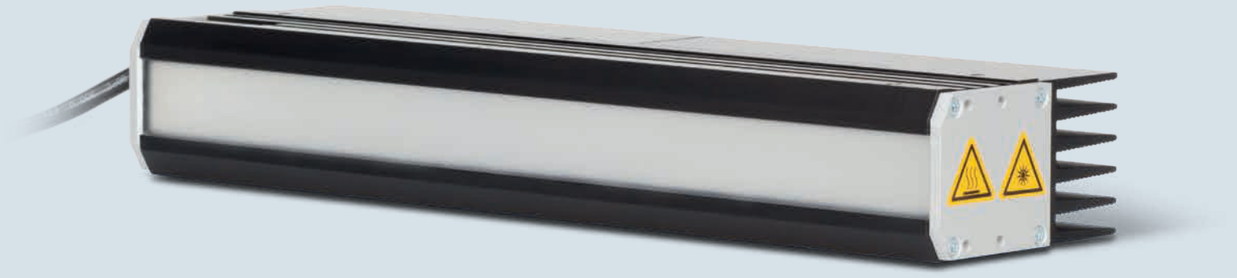
Corona II LED Line Lighting System

Back lighting and bright field illumination



With the outstanding luminance and uniformity of the Corona II bright field illumination, high-speed applications without any compromises in image quality are possible.

Features
Back lighting/Bright field illumination

- Ultra high bright: 280,000 cd/m² or 880,000 Lux
- Compact design
- Modular concept
- Compatible with other Corona options
- Compatible with XLC4 controller
- Various LED colors
  - Standard: White, red, green, blue
  - IR 850 nm or 940 nm
  - UV (395 nm - on request)
- Modular lengths up to 1360 mm per single module
- Multiple passive cooling options
- Active fan or water cooling
- Temperature stabilization
- High quality LED binning and color matching with other Corona options
- 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

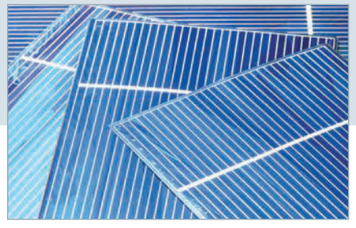
Customized solutions

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

Applications

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



Solar cells

Metal

Glas

THE CHROMASENS CORONA II FAMILY:

Three lighting concepts:

D

TOP LIGHT DARK FIELD

B

BRIGHT FIELD BACK LIGHTING

TUBE LIGHTING

Specifications:

CORONA II	
Illuminance (white)	Up to 280,000cd/m² (or 880,000 Lux on top surface)
Available module length	170 mm to 1360 mm in steps of 170 mm
LED colors	White (5500 Kelvin or 3500 Kelvin) Red (632 nm) Green (520 nm) Blue (452 nm) IR (850 nm and 940 nm) UV (395 nm on request)
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 complient, 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

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