

# Introducing, an Affordable and Accurate On-Line Colorimeter

# CR100FF

On-line real-time continuous color measurement for quality control in manufacturing.



# **Real-Time On-Line Color Measurement**

On-line real-time color measurement capable of up to 30 readings per second — great for products under the sensor only for a very short time: e.g., crackers/biscuits. Also, for continuous products. The CR100FF is built to last, easy to install and use, and virtually maintenance free for years of reliable results.

# **CR100FF Key Features** *Easy-to-Use Interface*



# Easy View of Historical Data



# COLORSPACE OUTPUT

A variety of color space outputs are available, typically viewed in the widely accepted CIE L\* a\* b\* specification. Each constituent color is available as a user-scalable analog/digital/bus output.

### CONTINUOUS MEASUREMENT

- Online non-contact measurement
- Repeatable and highly accurate
- Unaffected by ambient conditions
- Data logging can store up to 5,000 datapoints for download

### ADVANTAGES OF CR100FF

- Simple to operate and integrate into factory control systems
- Super-fast response time
- Unaffected by ambient conditions
- Tough cast aluminum/stainless steel sensor enclosure
- Beam measurement size can be set from 10–110 mm to match application requirements

# **Use Cases Across Industries**



### No Need for Sampling or At-Line Analysis

Class-leading colorimetric technology, a robust, reliable, built for purpose package, the CR100FF offers continuous color measurement of products, eliminating the need for frequent sampling or at-line analysis. The real-time process or product measurement offers process control, quality control, and product alarm.

The CR100FF uniquely offers high-speed measurement and is ideally suitable for intermittent products such as baked goods where product color is a critical control parameter for texture, consistency, and quality. This covers vast ground as can be seen from the verticals listed below:



### Food

- Potato Crisps
- Corn Snacks
- Tortillas
- Sugar
- Peanuts/Nuts
- Breakfast Cereals
- Pasta
- Biscuits
- Bread/Bread Rolls
- Coffee
- Crackers/Wafers
- Cake
- Flour
- Fruit
- Meat
- Sauces

#### Foils, Films, and Paper

- Color
- Opacity
- Pigment/Dyes
  - Bases
- Finished Product

# **Building and Construction**

- Slabs/Blocks
- Sand
- Bricks
- Ores
- Clay
- Glass
- Roofing Tiles
- Shingles
- Wood Panels

### Chemicals/Minerals

- Detergents
- Calcium Carbonate
- Ceramic Powers

# Traceable Color Standards

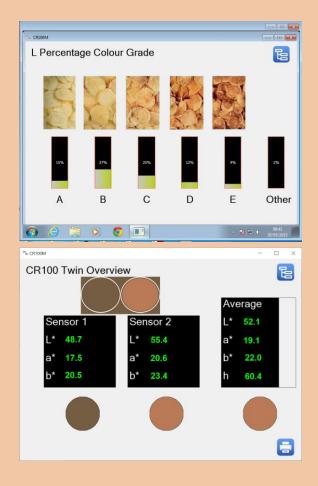
Senware NA offers traceable color standards for calibration/checks. Standards are available with calibration certificates valid for five years.

# Colotura Grading Software

Our custom application (for PC), called the Colotura grading software, allows set-ups, adjusts calibrations, selects product configurations, examines diagnostic values, and remotely views values and log data.

# Twin-Sensor Measurement

Senware North America can customize the Colotura grading software for specific applications. Typical applications include "L" grading software for the snack food industry which gives percentage readings for each color band of products; and twinsensor measurement of the complete area of slabs passing under the sensor.



# The CR100FF Advantage

Feature	Specification
Light Source	White Light D65
Geometry	0° Measure 20° Illumination
Resolution	12-bit A-D
Repeatability	0.0244%
Fast Gating Option	30 readings/second internally
Measured Color Constituents	L* , a* ,b* (other color specifications available)
Ambient Temperature	0–60°C; cooling options available for higher temperatures
Nominal Product Distance	200 mm
Product Height Compensation	+/- 20mm (based on products)
Power	90–240VAC 15 watts
Outputs	Analog 4–20mA, 0–10V
	Digital RS232/485, ethernet USB options
	Bus outputs available
Interface	LCD 5" touchscreen as standard

# Senware NA's Irresistible Offers!

- Three-month lease to own
- 100% lease applied to purchase
- One-year manufacturing warranty

# What Makes the CR100FF Unbeatable

- Near 100% uptime
- Maintenance-free devices
- MTTF/R of seven years

# To book a call with us, submit this form:

LET'S CONNECT



# **Contact Senware North America**

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