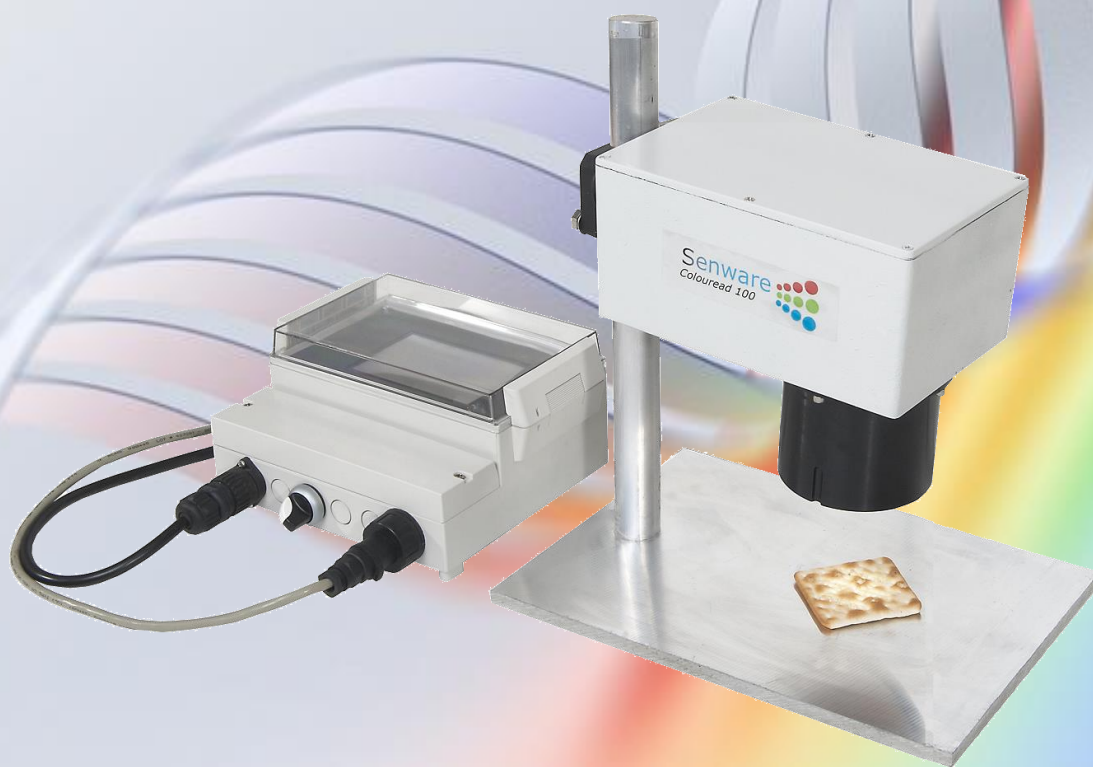
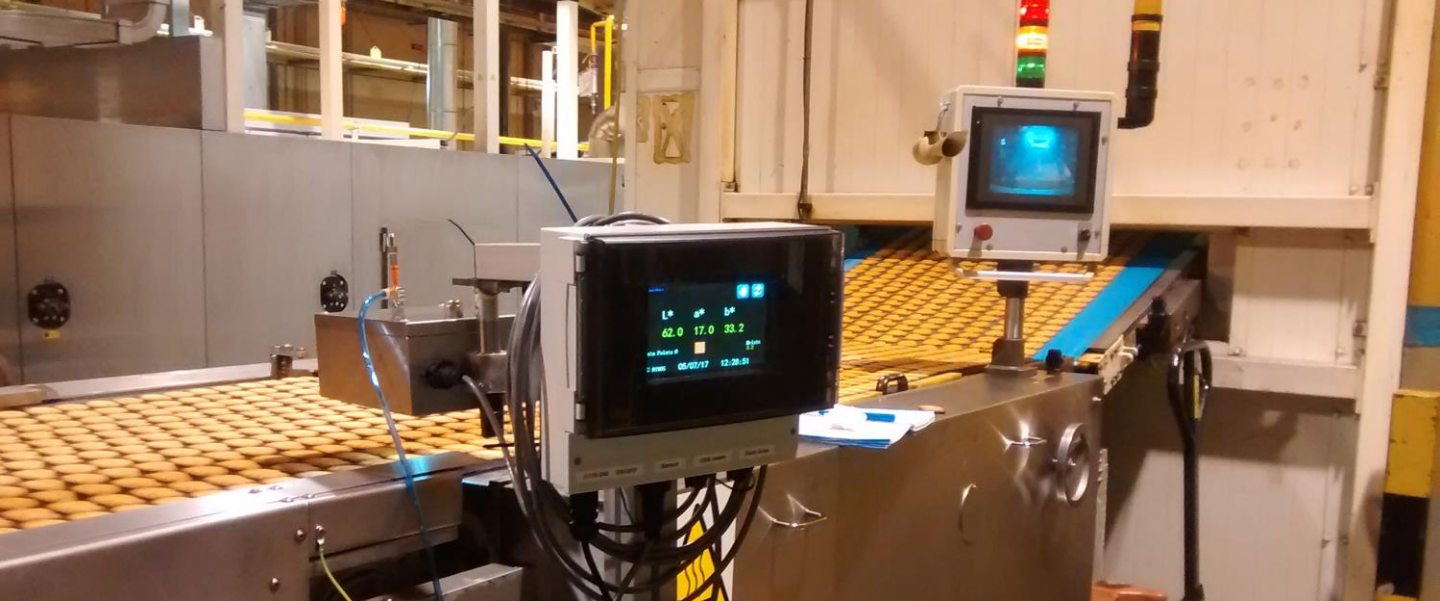


# On-line Colour Sensor



## CR100FF

Online real time continuous colour measurement for quality control in manufacturing processes.



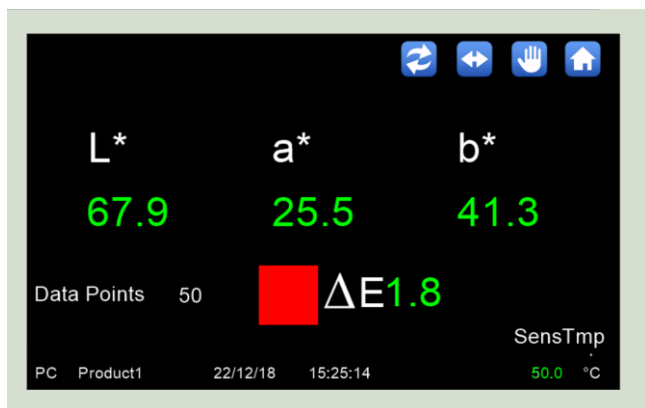
## REAL - TIME CONTINUOUS ON LINE MEASUREMENT

Online real time colour measurement capable of up to 500 readings a second, great for products that are only under the sensor beam for a very short time, for example Crackers/Biscuits, but also for continuous products.

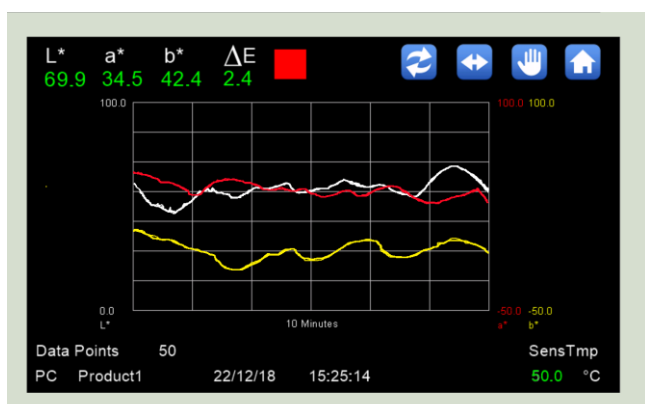
The CR100FF, built to last, very simple to install and use and virtually maintenance free for years of reliable results.

### CR100FF Key Features:-

#### *Easy to use screen*



#### *Easy view Historical Data*



### COLOURSPACE OUTPUT

A variety of colour space outputs are available, typically viewed in the widely accepted CIE L\* a\* b\*. Each colour constituent is available as a user scalable Analogue/Digital/Bus output.

### RAPID , CONTINUOUS ON LINE MEASUREMENT

- Online non-contact
- Repeatable and highly accurate
- Unaffected by ambient conditions
- Data logging can store up to 5000 datapoints available for download via USB Flash Drive

### ADVANGES OF CR100FF

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

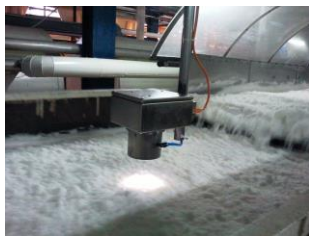
# CR100FF Applications



## The CR100FF On – Line Colour Sensor

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

The CR100FF uniquely offers very high speed measurement and ideally suited to intermittent products such as baked goods and where product colour is one of the critical control parameters for texture, consistency and quality.



## Food:-

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

## Foils ,Films and Paper:-

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

## Aggregates/Building :-

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

## Chemicals / Minerals:-

- Detergents
- Calcium Carbonate
- Ceramic Powers

## Traceable Colour Standards:-

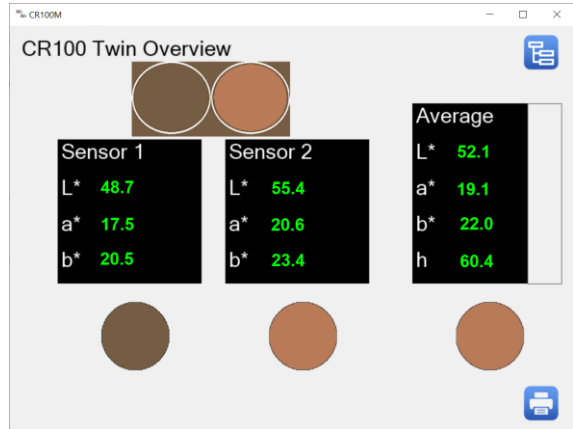
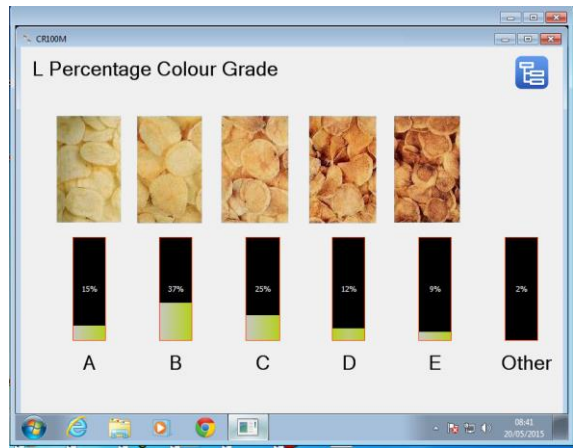
Senware now offer traceable Colour standards for calibration / check . Standards are available with certified calibration certificates valid for five years.

**Windows PC Software** 

Custom windows based software is available that allows set-up , perform or adjust calibrations , select product configurations , examine diagnostic values , remotely view values and log data.

Senware can customise the software for the specific application requirements.

Typical applications includes “L” grading software for the snack food industry , which can give percentage readings for each colour band of product produced , also twin sensor measuring the complete area of a slabs passing under the sensor.



**CR100FF Specifications:-**

|                                   |   |
|-----------------------------------|---|
| Measurement.....                  | Colorimetric  |
| Light Source.....                 | White Light D65   |
| Geometry.....                     | 0° Measure 20° Illumination                                 |
| Resolution.....                   | 12 bit A-D  |
| Repeatability.....                | 0.0244%   |
| Fast Gating Option .....          | 500 readings/second internally                              |
| Measured Colour Constituents..... | L* , a* ,b* simultaneously (other scales available)         |
| Ambient Temperature.....          | 0 - 60°C, Cooling options available for higher temperatures |
| Nominal Product distance.....     | 200 mm  |
| Product Height compensation.....  | +/- 20mm (Product dependant)                                |
| Power.....                        | 90-240VAC 15 watts  |
| Outputs.....                      | Analogue 4-20mA,0-10V                                       |
|                                   | Digital RS232/485,Ethernet ,USB options                     |
|                                   | Bus Outputs available                                       |
| Interface.....                    | LCD 5” Touchscreen as standard                              |



**For more information :-**

**[www.senware.co.uk](http://www.senware.co.uk)**

**Email [sales@senware.co.uk](mailto:sales@senware.co.uk)**

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