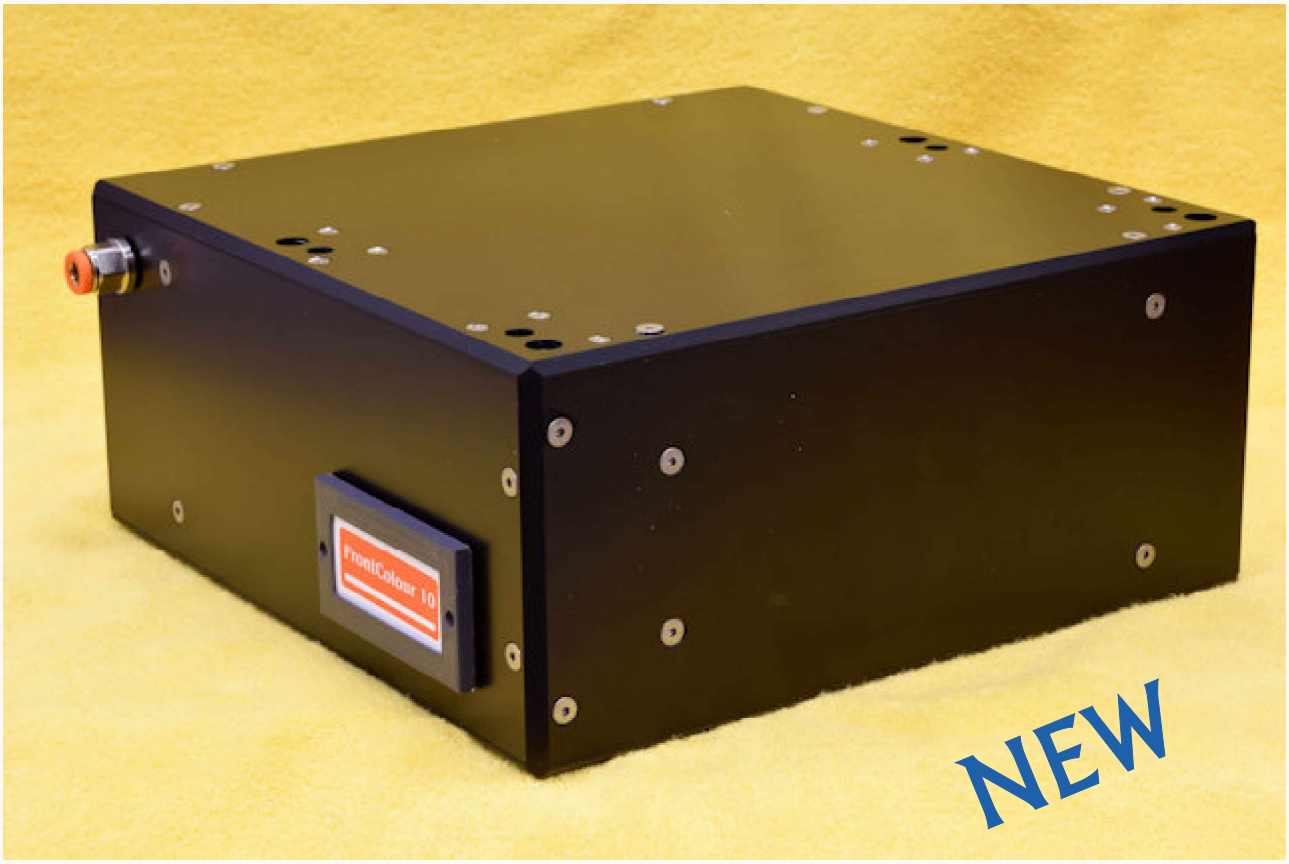
FrontColour10 ™
ON-LINE COLOUR METER



Advantages

- Problems are solved fast and downtime is minimized to maintain production quality
- Immediate readings of all CIE colour values of interest
- Data is archived and older data can be retrieved for comparison and reporting
- Stable meter gives reliable results, no need to recalibrate daily
- Meter can be moved to other positions or production machines, simple assembly
- Process control can use the analog outputs or the small control files optionally generated regularly
- Laboratory use facilitates pigment recipe work and colour matching

Benefits

- Used for plastics, pulp, pigments and paints, printing, boards, papers, most solid materials and most fibre materials
- Quick measurements, readings and reports
- Conforms to CIE 15:2004 and CIE 176:2006 requirements
- Reel counter with external trigger line
- Installed to many positions in production machines
- Simple to use, accurate readings, excellent stability
- One sensing head, self-calibrating optics
- An economical price

2026-23

VISILAB
SIGNAL TECHNOLOGIES

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Main Features

- targeted for QC, testing and research, applications in pulp, paper and board industry, textiles, felts, pigments, plastics, minerals, paints and coatings
- analyzing **X, Y, Z, chromaticity coordinates x,y,z - CIE L*a*b*, Lu'v' and L*u*v*, Yellowness J, TAPPI Brightness R457, CIE whiteness W, CIE Tint, colour difference dE* (for dL*, da*, db*), v', u*, v*, chromaticity, hue, saturation**. Also a special **Primary reflectance data R(lambda)** is obtained. Geometry is 0° /45° CIE 1964 10° observer, D65, A, C, D50, D55 or D75 illuminants
- uses a CCD spectrometer as a detector for analyzing the spectra, the architecture compensates against the light source and other variations. The spectrometer resolution is about 1.6 nm. A category B device
- superior stability, based on proven technology of Visilab
- in the process and laboratory the **FrontColour** program can be used via USB/RS232/Bluetooth, all data for archival, statistics and reporting
- spot size 8.75 mm in diameter allows small-scale measurements, size dictated by standards and distance
- LED light source with wideband excitation of 420 - 760 nm and a separate UV excitation 380 - 420 nm is user adjustable
- operating distance: **50 mm,** one headed observation
- extremely long service interval - designed to run 24/7

Data logging features

- all DCS analog interfaces are updated once per sec minimum, raw speed 2 / sec
- reel counter interface and reading added to data headers in files
- data acquisition speed 2 points /s minimum for all variables, output 2 points/s to interfaces typically
- the **FrontColour** program allows continuous data acquisition on-line with data archival and analysis. It has graphic displays for incoming data, a big number display, **recipe system** for optimizing small colour differences etc. It has a **colour tracker display** for a*b* showing the trend.
- The meter runs automatically without any computers. PC can be used for data acquisition and configuration. The operating mode (illuminator etc.) is changed with the PC quickly. The DCS sends out analog data if no computer used
- self-calibrating by optically multiplexing with the light source

Interfaces and physical properties

- **analog outputs** 0..5 V (4) for any output variable, 4-20 mA (1), both scalable
- **USB** for a PC directly in the box
- regular **RS232** via cable at 9600 (max. 40 m) or 115200 (max. 5 m) via RS232/USB converter
- an **input** for incrementing a reel counter (TTL type closing switch input)
- wireless communication via **Bluetooth**, the dongle for the PC included with the one for the PS
- operating voltage 24 V 15 W
- dimensions 120x270x270 mm, weight 3.5 kg
- IP67 enclosure for harsh environments
- power supply unit for 110 - 240 VAC mains is included. It has connectors for DCS interfaces.
- the **Frontcolour** is a licensed program with plenty of features, belongs to the instrument, operating in Windows 11+/10/8/7. It has a support program **FrontColourConfig** for making any deeper configuration changes and calibrations
- Mounting by four holes on the top face, M10 or M8
- laser pointers for aiding in accurate positioning while installing
- holders for flat samples

Ambient conditions

- operating +5 ...+60 C with air purge
- operating +5 ...+40 C without air purge
- overheating protection turns the meter to LowPower
- fully temperature compensated
- IP67 case, purge air through the cabinet
- optical windows can be cleaned if water condensation or dust, air purge used for keeping it clean

Optional accessories

- a dust cover for more difficult conditions
- Spectralon reflectance standard, NIST traceable
- colour standard set, NIST traceable
- wavelength calibration light source
- NIST traceable calibrated ceramic colour tiles
- holders for flat samples, colour tiles, wavelength calibrator and reflectance standard

Your nearest dealer:

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