

# FrontColour 5 On-line Brightness Meter



**NEW**

- **Designed for paper and pulp products and other solid and fiber materials**
- **Installed to many positions in production machines**
- **Simple to use, accurate readings, excellent stability**
- **Small size, light weight**
- **An integrated system, CIE 1964 10° geometry and ISO2470 applied in the measurement**
- **DCS interfaces: Profibus DP, serial RS232, USB, two analogs**
- **Wide Brightness range, no UV excitation for fluorescence effects**
- **Data logging and analysis features**
- **Suits laboratory and field, QC and research**
- **Single-point or scanner use**
- **Unbeatable pricing**

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**VISILAB**  
SIGNAL TECHNOLOGIES

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## Main Features of FrontColour 5

- applications in pulp and paper industry, textiles, felts, recycled fiber, packaging papers and liners, plastics
- ISO2470 Brightness according to CIE 1964 10° geometry, 0° /45° illumination/measurement
- simple to use but has useful features for advanced work
- for single-point or scanner use in on-line QC measurements
- wide Brightness range starting from 0 up to about 150, calibrated at 100 units, works fine even near zero
- self-consistent, power supply included, ready to start
- fast response, selectable digital filtering, 10 points per sec sampling and updating of data
- applies latest LED and signal processing technology for getting the fastest and most stable response
- superior stability, based on proven technology of Visilab
- the price is very competitive and the payback time is usually short
- other geometries can be tailored according to customer needs

## Data logging features

- Sampling & output rate 10 Hz
- operating distance: 20 +/-2 mm
- measuring area 3.5 mm in diameter
- repeatability < +/-0.2 Brightness units
- noise level typically < 0.1 standard deviation in Brightness units for a running pulp web
- stability < +/-0.2 Brightness units / year
- factory calibrated to a NIST traceable reflectance standard to 100.0 +/-0.2 Brightness units
- memory bank for holding up to 4096 sample data points
- memory bank can be downloaded to a PC
- autotimer sampling (adjustable sampling interval and batch size), also an external hardwired trigger
- extremely low noise level (typically < 0.02 BU stddev)
- a unique BURST mode for piecewise products, like small batches on a conveyor or a sheet process
- large calibration table library (100 tables) with rapid switching, not likely needed
- calibration with multiple points for linearization (2 - 10 points)
- high immunity to external light radiation, web speed, external lights
- long service interval 175 000 h
- very low power consumption (< 6W), no water cooling, cool air purge to the outside is sufficient in difficult conditions
- Signal Quality system in use, available for further use
- a special very fast version is available measuring at 400 Hz. That version will require annual checkup of the sensor stability.

## Interfaces and physical properties

- dimensions 160x180x120 mm, weight 0.90 kg
- sturdy IP67 enclosure
- Profibus DP at maximum 12 Mbauds
- analog outputs for Brightness and other signals
- temperature, voltage range settable and scalable
- regular RS232 via cable at 9600/38400/115200 for PC's COM port, USB
- the free PC programs are data acquisition software for trend display, data archiving, manipulation etc.
- meter configuration is saved, meter starts the next session like that

## Ambient conditions

- operating -10 ... + 50 C, needs air purge if over + 35 C
- overheating protection turns the meter to LowPower
- optical head is inside a box giving full protection
- fully temperature compensated
- IP67 case
- optical window can be cleaned if water condensation or dust

## Optional accessories

- a Bluetooth connection with up to 100 m link is available
- a reflectance standard

## Your nearest dealer:

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