FrontColour 5 On-line Brightness Meter

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- 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
- Measuring distance 200 mm from the bottom to web
- Light weight
- An integrated system, CIE 1964 10° geometry and TAPPI R457
- DCS interfaces: 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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Main Features of FrontColour 5

- applications in pulp and paper industry, textiles, felts, recycled fiber, packaging papers and liners, plastics
- TAPPI R457 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, measuring distance 200 mm
- 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, very long distance versions, like 200 mm are possible

Data logging features

- Sampling & output rate 10 Hz
- operating distance: 200 + /-4 mm
- measuring area 35 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
- immune to surface texture as long as within distance range
- 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

Interfaces and physical properties

- dimensions 270x270x120 mm, weight 2.90 kg
- sturdy IP67 enclosure
- analog outputs for Brightness and other signals temperature, voltage range settable and scalable
- regular RS232 via cable at 9600/115200 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, dimensions may vary depending on stock available
- optical window can be cleaned if water condensation or dust

Optional accessories

- a Bluetooth connection with up to 100 m link is available to the power supply unit -PS
- Dar a reflectance standard, NIST traceable

Your nearest dealer:

Visilab Signal Technologies Oy
Sepäntie 4, Fl-07230, Monninkylä, Finland
Tel. + 358-45-6354885
www.visilab.fi
e-mail: info@visilab.fi

