Brontes

colorimeter

Colour measurement according the human eye

The Brontes colorimeter has been designed to operate in areas where colour reproduction is extremely important and where long term stability needs to be guaranteed without the need for periodic calibrations. The Brontes uses interference filter based technology which guarantee long term stability and consistency among devices.
Industries like the display (LCD) or LED industry can benefit from the high speed and high accuracy of the Brontes colorimeter. Other industries that need high speed colour measurement for sorting, can measure up to 5500 colour points per second.

Highlights:

- high speed colour measurement
- measure colour : XYZ, Yxy, CIEL*a*b*, Yu'v', LCH...
- trigger input for in-line applications
- general Purpose I/O for control
- measure via PC (also embedded) or stand alone
- USBTMC standard compliant

Fields of applications:

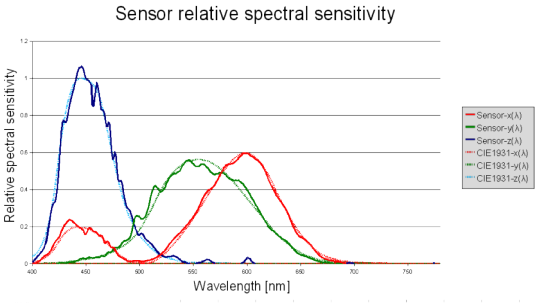
- LCD, LED and plasma display measurement
- Colour & Gamma measurement
- white point adjustment
- Contrast measurements
- flicker measurements (JEITA & Contrast method)
- Response time measurement
- Transmission measurement

admesy
ADVANCED MEASUREMENT SYSTEMS
http://www.admesy.nl | info@admesy.nl | +31-475-600232

Brontes colorimeter

System features:

Measurement system	
Photo detector	Silicon photo diodes using interference based XYZ filters
Spectral response	Approximates CIE 1931 2 degree colour matching functions
Colour systems	XYZ, Yxy, Yuv, Lab, Luv, correlated colour temperature, dominant wavelength
Optical system	enclosed lens system- direct measurement 6° Field of View
Measurement speed	5.500 colour points per second, 18.000 luminance samples per second
Interfaces	
USB 2.0	USBTMC compliant, SCPI command set, full speed device
RS232	Same command set as USB
I/O	4 lines 3.3V general purpose IO
Trigger IN/OUT	3.3V compliant
Size	
LxWxH	50x50x100 mm
Mounting	1/4 BSW and 4xM4 threat on bottom plate and 4xM4 on front side



Colorimeter specification:

Parameter	Range	Accuracy	Repeatability
Luminance	0.05 cd/m² - 500.000 cd/m² 8 gain stages, including auto ranging function	±4% of measured value	±0.1%
Chromaticity:xy	approximates CIE1931 colour matching functions	±0.001 absolute at equal energy point (xy=0.333)	xy:±0.001 for Y > 2 cd/m² xy:±0.0002 for Y > 10 cd/m²
CR measurement	Up to 150.000	±5% (depending on Lowest Y value)	±5% (depending on lowest Y value)
Response time	>0.1 ms	±2%	
Flicker	>0.05% at 50% Luminance level at every gain stage.	±0.2% at 50% luminance level.	±0.2%
Temperature	0-50 ° C		