

Function list

Ver. 2.00

	Function	Professional	Basic	Lite
Instrument control	Measurement/Calibration	✓	✓	✓
	Automatically averaged measurements	✓	✓	✓
	Manually averaged measurements	✓	✓	✓
	Interval measurements	✓	---	---
	Remote measurements *1	✓	✓	✓
	Uploading of data stored in instrument *1	✓	✓	✓
	List view of data stored in instrument *1	✓	✓	✓
	User calibration *2	✓	✓ *5	---
	UV calibration *3	✓	---	---
	Setting target color on instrument *1	✓	✓	✓
	Various instrument settings	✓	✓	✓
Data display	Data list view	✓	✓	✓
	Statistics view	✓	✓	✓
	Pseudocolor patches	✓	✓	✓
Graph display	Absolute and difference graphs for spectral reflectance/transmittance, K/S, and absorption	✓	✓	✓
	L*a*b* absolute values	✓	✓	✓
	$\Delta L^* \Delta a^* \Delta b^*$ (2D/3D, MI)	✓	✓	✓
	Hunter Lab absolute values	✓	✓	✓
	Hunter $\Delta L \Delta a \Delta b$ (2D)	✓	✓	✓
	xy chromaticity diagram	✓	✓	✓
	Trend graph	✓	✓	✓
	Histogram	✓	✓	✓
2D graph of user-selected values*4	✓	✓	✓	
Image display (JPEG or BMP format)	Image display	✓	✓	✓
	Linking of image and data	✓	✓	✓
User-designable screen layout	Graph layout function	✓	✓	✓
	Addition of pages to canvas window	✓ (Max. 10 pages)	---	---
Tolerance setting function	Setting and use (Pass/Warn/Fail)	✓	✓	✓
	Automatic setting	✓	---	---
Primary/secondary (working) target colors	Setting of primary and secondary (working) target color	✓	---	---
	Use of primary and secondary (working) target color	✓	✓	✓
Macro function (User workflow definition function)	Creation of macro	✓	---	---
	Running of macro	✓	✓	✓
Supplementary data information	Setting of supplementary data information	✓	---	---
	Viewing of supplementary data information	✓	✓	✓
Security function	User management function	✓	---	---
	Operation restriction	✓	---	---
	Audit tracking	✓	---	---
	File lock function	✓	---	---

Function		Professional	Basic	Lite
Color spaces/indexes		Full (see Color Space & Index List)	Limited (see Color Space & Index List)	Limited (see Color Space & Index List)
Data input/output	Opening/saving of SpectraMagic NX data files (extension: "mes")	✓	✓	✓
	Opening/saving of SpectraMagic NX template files (extension: "mtp")	✓	✓	✓
	Saving of data in text format (CSV, TXT)	✓	✓	✓
	Importing of data in a specific text format	✓	✓	---
	Saving of data in XML format	✓	✓	✓
	Copying of list view items to clipboard	✓	✓	✓
	Creation of CM-5/CR-5 data files (extension: bdt)	✓	✓	✓
Printing functions	User-definable printer report layout	✓	✓	✓
	Data list printing	✓	✓	✓
	Printing to serial printer	✓	✓	✓
Other functions	Navigation function (On-screen guidance for operating procedures)	✓	✓	✓
	Includes "Precise Color Communication", an e-book on color theory and color measurement	✓	✓	✓
	Setting of shortcut keys	✓	✓	✓
	Display of large-sized buttons	✓	✓	✓

*1 Not available with CM-3xxx series instruments

*2 Only when connected instrument is CM-36xx series, CM-2600d, CM-700d, CM-5 or CR-5

*3 Only when connected instrument is CM-3700d, CM-36xx series, or CM-2600d

*4 Graph of any 2 items from among color/index displayed in list or numerical supplementary data values.

*5 Only when connected instrument is CM-5 or CR-5

Color Space & Index List

Ver. 2.00

Color space/Index	Professional	Basic	Lite
XYZ (Absolute/difference)	✓	✓	---
L*a*b* (Absolute/difference)	✓	✓	✓
Hunter Lab (Absolute/difference)	✓	✓	✓
L*C*h (Absolute/difference)	✓	✓	✓
Lab99 (Absolute/difference)	✓	✓	✓
LCh99 (Absolute/difference)	✓	✓	✓
Yxy (Absolute/difference)	✓	✓	---
L*u*v* (Absolute/difference)	✓	✓	---
L*u'v' (Absolute/difference)	✓	✓	---
ΔE^*ab	✓	✓	✓
CMC	✓	✓	---
CMC lightness difference component (ΔL)	✓	✓	---
CMC chroma difference component (ΔC)	✓	✓	---
CMC hue difference component (ΔH)	✓	✓	---
ΔE^*94	✓	✓	---
ΔE^*94 lightness difference component (ΔL)	✓	✓	---
ΔE^*94 chroma difference component (ΔC)	✓	✓	---
ΔE^*94 hue difference component (ΔH)	✓	✓	---
$\Delta E00$	✓	✓	✓
$\Delta E00$ lightness difference component (ΔL)	✓	✓	✓
$\Delta E00$ chroma difference component (ΔC)	✓	✓	✓
$\Delta E00$ hue difference component (ΔH)	✓	✓	✓
ΔE (Hunter)	✓	✓	✓
$\Delta E99$	✓	✓	✓
ΔEc (degree) (DIN 6175-2)	✓	✓	---
ΔEp (degree) (DIN 6175-2)	✓	✓	---
FMC-2	✓	---	---
NBS100/200	✓	---	---
Color assessment	✓	✓	✓
Munsell JIS Z8721 1964	✓	✓	✓
MI (Metamerism index)	✓	✓	✓
8° gloss	✓	✓	---
Whiteness Index (CIE) and difference	✓	✓	---
Whiteness Index (ASTM E313-73) and difference	✓	✓	---
Whiteness Index (Hunter) and difference	✓	✓	---
Whiteness Index (Taube) and difference	✓	---	---
Whiteness Index (Stensby) and difference	✓	---	---
Whiteness Index (Berger) and difference	✓	---	---
Whiteness Index (ASTM E313-96) and difference	✓	---	---
Whiteness Index (Ganz) and difference	✓	---	---
Tint (CIE) and difference	✓	---	---
Tint (ASTM E313-96) and difference	✓	---	---
Tint (Ganz) and difference	✓	---	---
Yellowness Index (ASTM D1925-70) and difference	✓	✓	---
Yellowness Index (ASTM E313-73) and difference	✓	✓	---

Color space/Index	Professional	Basic	Lite
Yellowness Index (ASTM E313-96) and difference	✓	---	---
Yellowness Index (DIN 6167) and difference	✓	---	---
Blue reflectance (ASTM E313-73) and difference	✓	✓	---
Brightness (TAPPI T452) and difference	✓	---	---
Brightness (ISO 2470) and difference	✓	---	---
Opacity (TAPPI T425) and difference	✓	✓	---
Opacity (ISO 2471) and difference	✓	✓	---
Correlated Haze (ASTM D1003-97) and difference	✓	✓	---
STATUS A density and difference	✓	---	---
STATUS T density and difference	✓	---	---
Rx, Ry, Rz and their respective differences	✓	---	---
Standard depth (ISO 105.A06) and difference	✓	---	---
Staining Degree (ISO 105.A04(E)); Illuminant C/2° Observer and Illuminant D65/10° Observer	✓	---	---
JIS Staining Degree and Grade (Ns , Ns Grade)	✓	---	---
Grey Scale (ISO 105.A05.2)	✓	✓	---
Grey Scale Rating (ISO 105.A05.2)	✓	✓	---
K/S strength (Total wavelength)	✓	✓	---
K/S strength (at maximum absorption wavelength)	✓	✓	---
K/S strength (wavelength of maximum absorption wavelength)	✓	✓	---
K/S strength (user wavelength)	✓	✓	---
K/S strength (Difference ΔE^*ab)	✓	✓	---
K/S strength (Difference ΔL^*)	✓	✓	---
K/S strength (Difference ΔC^*)	✓	✓	---
K/S strength (Difference ΔH^*)	✓	✓	---
K/S strength (Difference Δa^*)	✓	✓	---
K/S strength (Difference Δb^*)	✓	✓	---
Strength: Tristimulus (%)	✓	---	---
Strength: Pseudo Tristimulus (%)	✓	---	---
Dominant wavelength	✓	---	---
Excitation purity	✓	---	---
555	✓	---	---
NC#	✓	---	---
NC# class	✓	---	---
User-defined equation	✓	✓	---
Munsell D65 (JIS Z8721 1993)	✓	✓	✓
Gardner *1	✓	✓	✓
Iodine Color Number *1	✓	✓	✓
Hazen/APHA *1	✓	✓	✓
European Pharmacopoeia *1	✓	✓	✓
US Pharmacopoeia *1	✓	✓	✓

*1 Only when connected instrument is CM-5 and index is selected at the time of measurement.