

## SEKONIC ENTERS INDUSTRIAL LIGHTING MARKET WITH NEW SPECTROMASTER C-7000



Tokyo, Japan – November 5, 2015 – Sekonic Corporation, **Industrial Light Measurement Division**, announced the release of the NEW SpectroMaster C-7000 spectrometer designed for industrial applications. The SPECTROMASTER C-7000 is the first industrial meter from Sekonic to lead the way into the diverse and expanding lighting industrial industry. Offering unique and advanced color measurement and analyzing features, the SPECTROMASTER C-7000 is a competitively priced and sophisticated solution for a vast number of lighting and color-conscious industries.

With the increasing use of advanced LEDs, and Organic Electroluminescence lamps, the need to understand, manage and control these sophisticated systems has never been more important. Responding to this growing need, SEKONIC created the C-7000, a handheld, stand-alone spectrometer. Incorporating a CMOS linear image sensor, it is designed to measure every light source including LED, HMI, Fluorescent, Tungsten as well as Natural light. In addition, it uses a sophisticated accumulation type sensor (first utilized in the C-700 SpectroMaster series), to give it the unique ability to also measure electronic flash.

Similar to the Sekonic C-700 series Photo/Cine spectrometers, the C-7000 offers an intuitive 4.3" color touch screen display which provides easy navigation through the various display screens. Informational display screens such as Correlated Color Temperature, Illuminance, Color Rendering Index (CRI), Tristimulus Value, Chromaticity Coordinates (for CIE1931/CIE1964 & CIE1976 standards), Peak Wavelength, Excitation Purity and Photosynthetic Photon Flux Density and more are at your fingertips. Enhanced measurement data and display modes of the C-7000 provide the information that is widely utilized in light manufacturing and quality control, as well as monitoring illumination of offices, roadways, and public facilities to meet government lighting standards. Indoor agricultural lighting, precision medical light control and many more lighting industries will find the C-7000 of particular usefulness in their daily application to meet requirements for lighting control.

Connecting the C-7000 to a Windows based PC enables users to make meter settings with the C-7000 Utility (included with the meter) and output CSV format files of measurement data in 1 nanometer (nm) wavelength increments from 380 to 780 nm as well as graphs of spectral distribution, CRI, and chromaticity diagrams for CIE 1931(1964) and CIE1976 color spaces.

During a recent interview, Mr. Lorenzo Gasperini (Industrial Sales & Marketing Manager) stated that *“SEKONIC is a well-respected and popular brand in the photo/video industry and now it can offer its expertise and experience in light measuring instruments to a wider and much deeper market. These are exciting times for SEKONIC as we expand our market and learn more on how we can integrate our technology further.”*

## Key Features:

- Measures LED, HMI, Fluorescent, Tungsten, Natural Light and Flash in 1 nanometer (nm) output wave length increments from 380 to 780 nm
- The world's first\*<sup>1</sup>stand-alone spectrometer that measure the flash light with sync. cord connection or cordless mode. The measurement range for flash light is from 20lx·s to 20,500lx·s
- User-friendly design: 270 degrees swivel head, dark calibration without cap, large 4.3"color touch panel LCD and Customize function
- Wide measurement range of Color Temperature (1,563 to 100,000K)and illumination (1 to 200,000lx in ambient light, 20 to 20,500lx·s in flash light)→
- Various displays (Text, Spectrum Graph, Spectrum Comparison Mode, CRI Mode, CIE1931 (CIE1964) Mode, CIE1931 (CIE1964) Comparison Mode, CIE1976 Mode, CIE1976 Comparison Mode).
- Measurements of Kelvin (K), Illuminance (lux), CRI (Ra, R1 thru. R15),Deviation( $\Delta uv$ ), Tristimulus values(XYZ),Chromaticity Coordinate(xyz / u'v'), Dominant Wavelength( $\lambda_d$ ), Peak Wavelength( $\lambda_p$ ), Excitation Purity(Pe), PPF(D)Photosynthetic Photon Flux Density).
- Up to 999 data measurements can be stored in memory. Memory function also enables naming or renaming the title of memory and clearing the stored value. It is useful to compare various light sources or to check deterioration of single sources over time.
- C-7000 Utility (in CD-ROM included in the package) offers easy settings and updating firmware on Windows basis in the meter. Via C-7000 Utility software, the output of the spectrum data at every 1nm in CSV format and the output of the spectrum distribution graph, CIE1931 (1964), CIE1976 diagram, CRI graph bar in JPEG/BMP/PNG format are also available.

*\*1 – As of August 2015, by research of Sekonic Corporation  
Features and specifications are subject to change without notice*

For more information Contact:

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To learn more about the SPECTROMASTER C-7000 meter, visit us at

[www.sekonic.com/industrial/c-7000](http://www.sekonic.com/industrial/c-7000)

## C-7000 Specifications

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|---|--|
| Illuminance Meter Class   | * Class A of JIS C 1609-1: 2006 "Illuminance meters Part 1: General measuring instruments"<br>* DIN 5032 Part 7 Class C  |
| Sensor  | CMOS linear image sensor   |
| Spectral Wavelength Range                                       | 380nm to 780nm   |
| Output Wavelength Pitch   | 1nm (Requires the C-7000 Utility to output memorized data)   |
| Spectral Bandwidth  | Approx. 11 nm (half bandwidth)   |
| Measuring Range   | Ambient light: 1 to 200,000lx (= 0.1 to 18,600fc), 1,563 to 100,000K (more than 5lx required)<br>Flash light: 20 to 20,500lx • s (= 1.86 to 1,900fc • s), 1,563 to 100,000K                |
| Accuracy (Standard Illuminant A)                                | Illuminance: $\pm 5\%$ + 1 digit (1 to 3,000lx)<br>x,y: 0.003 (Standard Illuminant A, 800lx)   |
| Repeatability (Standard Illuminant A)                           | Illuminance: 1%+1 digit (30 to 200,000lx), 5%+1 digit (1 to 29.9lx)<br>x,y: 0.001 (500 to 200,000lx)<br>x,y: 0.002 (100 to 499lx)<br>x,y: 0.004 (30 to 99.9lx)<br>x,y: 0.008 (5 to 29.9lx) |
| Visible-region Relative Spectral Response Characteristics (f1') | 9% or less   |
| Cosine Response (f2)  | 6% or less   |
| Temperature Characteristic                                      | Illuminance: $\pm 5\%$ of indicated value<br>x,y: $\pm 0.006$ (Standard Illuminant A, 1000lx)  |
| Humidity Characteristic   | Illuminance: $\pm 3\%$ of indicated value<br>x,y: $\pm 0.006$ (Standard Illuminant A, 1000lx)  |
| Power Source  | AA (1.5V) x 2 pcs, USB bus power   |
| Measurement Time  | Ambient: Auto - Max.: 15 sec., Min.: 0.5 sec.<br>Ambient : Manual - 0.1s, 1sec.<br>Flash: 1 to 1/500 sec. (in 1 step)  |
| Measuring Modes   | Text mode, Spectrum mode, Spectrum Comparaision mode, CRI mode, CIE1931 (CIE1964) mode, CIE1931 (CIE1964) Comparaision mode, CIE1976 mode, CIE1976 Comparaision mode                       |
| Other Functions   | Up to 999 memory, Preset function, Auto power off, Auto dimmer, 2 or 10 deg. Field of view setting   |
| Display languages   | English, Japanese, Chinese (Simplified) - factory preset, user cannot change.  |
| Interface   | USB 2.0  |
| Operating Temperature   | -10 to 40 °C   |
| Storage Temperature   | -10 to 60 °C   |
| Dimensions  | 73mm (w) × 183mm (h) × 27mm (d) = 2.9" (w) × 7.2" (h) × 1.1" (d)<br>(Excluding light receiving mechanism) max. thickness 40mm (d) = 1.6" (d)   |
| Weight  | 230g = 8.1oz. (without batteries)  |

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