



CAPRIS® CMS2

Contrast Measurement System for off-line Quality Assurance of wire markings



marking

CAPRIS CMS2

Contrast Measurement System

Designed specifically for off-line contrast measurement of laser and ink marks on electrical wiring

The CAPRIS CMS2 - Contrast Measurement System provides a convenient off-line Quality Assurance tool which can be used simply and quickly to monitor and measure the contrast of end-user applied and manufacturers' markings on wire and cable, for aerospace and other applications.

The system is able to measure contrast accurately, repeatedly and efficiently, independent of time or the operator, and provide a record of the measurements for quality tracking purposes.

The CAPRIS CMS2 system uses a unique Spectrum-patented area measurement technique. Through the use of a video system and area scan camera the system images the mark and makes a determination of contrast from a single measurement over a large sampling area. This is much faster and more accurate than making manual multiple individual point measurements.

The unit is designed for simplicity of use. Samples are loaded into a precision mount which is positioned in the measuring recess. The operator adjusts the position of the sample while observing the image on screen.

A PC with Spectrum's proprietary custom Windows-based software enables the contrast of a sample to be accurately calculated in a single measurement.

At the click of the mouse, the unit measures and calculates the average contrast of the mark and provides a simple PASS/FAIL result for operators.

Data from multiple measurements can be stored to provide an overall average contrast value. The operator has the option to store the contrast result, the sample information and the image on file.

The CAPRIS CMS2 operation and performance has been verified by the US National Institute of Standards and Technology (NIST) under a US Navy funded programme.

It is recognised and qualified to Boeing's key BAC 5152 process specification as well as to Sikorsky's SS7333 specification. It also complies with the requirements of the latest test methods such as EN 3475-Part 705, Contrast Measurement and AS4373 - Test Methods.

When used alongside a Nova wire marking system the Nova internal power checks and adjustments and CAPRIS CMS 2 measurements ensure that the overall marking process is operating correctly.



Europe:
Spectrum Technologies PLC
Western Avenue
Bridgend,
CF31 3RT
UK

T: +44 (0)1656 655437
F: +44 (0)1656 655920

North America:
Spectrum Technologies USA Inc
Fossil Creek Tech Center
3934 Sandshell Drive
Fort Worth, TX, 76137
USA

T: +1 817 232 2373
F: +1 817 232 4354

Asia-Pacific:
Spectrum Technologies Asia Pacific
上海市浦东新区建韵路500号4幢905室
Room 905, Building 4,
500 Jianyun Road, Pudong District,
Shanghai, 201318,
P. R. China

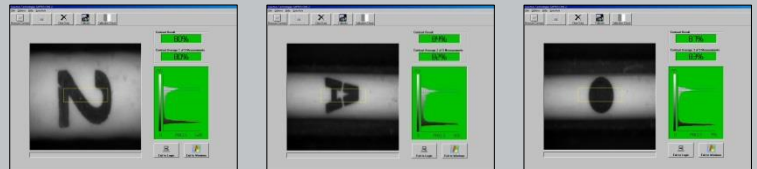
T: +86 021 6052 3365

www.spectrumtech.com

sales@spectrumtech.com

Summary Specification

CMS2 comprising:	Contrast measurement module (CMM), PC with area scan camera and preloaded with custom CMS software, 3 precision wire mounts and calibration tile assembly
Contrast range:	Suitable for measurements in the range 35 to 100% (for white and light coloured wires only)
Accuracy:	+/-2%
Warm up time:	5 minutes
Measurement:	Area measurement system with area scan camera enables contrast values to be measured and calculated from a single image within ~15 seconds - including set up
Results:	Displayed on PC monitor with option to store the result and image on file
Wire size range:	26 AWG (0.9 mm/0.03 inch OD) to 6 AWG (6.3 mm/0.13 inch OD)
Calibration:	Black, white and grey tiles provided, traceable to National Standards. "Quick check" facility enables operator to confirm calibration status in 10 seconds.
Observation area:	~ 3.4 mm x 2.5 mm (0.13 x 0.10 inches)
Illumination:	Single lamp with two fibre optics at 45°
Colour temperature:	3100 K
Lamp replacement:	Every 6 months to maintain colour temperature
Photopic response:	A photopic filter is included in the detection system to ensure that the CMS2 simulates the response of the human eye.
Dimensions (CMM):	18 cm x 23 cm x 39 cm (7 x 9 x 15 inches) (W x D x H)
Weight (CMM):	8.4 kg (18.5 lbs)
Power requirements:	Single phase: 110V, 2A, 60 Hz or 230V, 1A, 50 Hz
CE Conformity:	In compliance with EC and FDA directives



Technical Support

- 12 month return to base warranty as standard on all new systems
- Round-the-clock global support network with rapid response to any issues and 24 hour telephone hotline support
- Dedicated team of fully trained field service engineers in 3 continents as well as sales & service partners covering more than 25 countries worldwide
- Operational training for Production and Technical personnel carried out at installation.
- Maintenance contracts available to keep systems operating at optimum performance
- Spare parts stocked in the UK, US & China

CAPRIS is a Registered Trademark of Spectrum Technologies PLC
COPYRIGHT 2014 SPECTRUM TECHNOLOGIES PLC All rights reserved.
The CAPRIS CMS2 design and mode of operation is patented under patents granted in the USA, United Kingdom, Germany and France. European Patent No. 0925549, US Patent No. 6826307
Above specification subject to change without prior notice to provide for continuous product improvement.