Designed for Fine-Art, Decor and Professional Cartography; the DRS 1600 DCS integrates Metis exclusive DC SynchroLight (Patent protected technology)
The new Metis DRS 1600 DCS system is particularly suitable for high quality digitization and reproduction in the Fine-Art and Decor Markets. This is possible thanks to different technical solutions especially designed by Metis for this system (that has no equal in other scanners) such as the new DC SynchroLight lighting system and the “Light Inspector” software tool. In fact, the DC SynchroLight lighting system (patent protected technology) allows to obtain thousands of different light schematics providing a high capacity of image enhancement and quality optimization. The combination of the “Light Inspector” software and the DC SynchroLight lighting also allows to scan 3D information and store the depth map of the original together with the color information. The 3D information can be used individually (for example when scanning a painting in order to extrapolate the brush signs from the color information), or combined with the color image to obtain outstanding results, so far unreachable. Moreover, the “Light Inspector” tool also allows to store all the different light schematics in the same image file with the possibility to vary the light in real time directly by software and without the need to rescan the original.

The new Metis DRS 1600 DCS system is the only system in the world able to guarantee a very high geometric accuracy, which is fundamental for the digitization in professional cartographic applications. In fact, in professional cartography, faithful digitization of the original is essential, as the mutual distances between two points represent a specific distance information which must be safeguarded and reproduced as much precisely as possible. The DRS 1600 DCS, thanks to the particular opto-mechanical design and to unique solutions introduced by Metis, is able to provide images with practically perfect geometry and with a maximum measureable error less than 0.3% (measured in all directions and not only horizontally). This result is about 10 times better than what is today obtainable by any other professional scanner on the market, as repeatedly demonstrated by comparative technical tests carried out by primary European institutions.

The DRS 1600 DCS system is suitable for digitization modern and historical cartography (bottom image: an old map of Naples).
In the next images it’s possible to see a detail of a painting acquired in natural color and the relative 3D information. In this case the 3D image allows to study the brush and stroke with a high degree of detail by providing information that is otherwise invisible.

In the following detail of a ceramic, the choice of a suitable light schematic with the addition of 3D information, allowed to obtain a color image in which the relief of the ceramic is clearly visible.

Thanks to the DC SynchroLight, from a single scan is possible to extrapolate thousands of different versions of the same original. In the Decor market that allows to save multiple levels in addition to the image in natural colors. This enable, for example, to print separately the color information and the 3D relief or creating and printing multiple color channels.
The DRS 1600 DCS is the latest addition to the METIS DRS DCS family with a convenient acquisition format of up to 160x103cm. It has been designed for the most demanding applications such as Fine-Art / Decor reproduction as well as for Professional Digital Cartography. The DRS 1600 DCS introduce new important features which have no comparison in any other system on the market such as the innovative DC SynchroLight lighting system (Dynamically Controlled Synchronized Light) which incorporates a new technology developed by Metis, covered by patent deposited in January 2010, which allows dynamic control of the light in the scanning area. The DC SynchroLight technology gives the ability to control and change dynamically, instantly and automatically the angle and intensity of the light emitted by the light sources in the scanning area, making it possible to optimize the result of the digitization, depending on the type and nature of the originals. In addition to the DC SynchroLight, Metis has also designed a proprietary software tool that allows 3D scanning and post-scan light variations for real-time light changes, without the need to rescan the original; post-scan light changes enable to select the best light schematic in a matter of seconds and providing unique results unreachable by any other system. Some of the other benefits introduced by the new DRS 1600 DCS system are: no glass is needed in order to flatten the originals; the digital camera integrated into the DRS 1600 DCS system has been vertically motorized in order to allow achieving an optical resolution of 800PPI (and up to 1600x800PPI); high scanning speed and operativity; perfect geometrical accuracy and high depth of field; extremely powerful and complete driving software with special Fine-Art / Decor features as “Light Inspector tool” which allow to test thousands of different light schematics in real-time; special 3D and gravure scanning mode and filters allow to highly enhance the original texture / material. Metis MDC RAW format allows to change the light schematics when required without the need to rescan the original.

### DRS 1600 DCS General Features
- Maximum scan format: 160x103cm
- Maximum thickness: 20cm
- Variable Optical Resolution: 355-800PPI (355PPI=160x103cm, 800PPI=160x45cm); adjustable from 100 to 1600 PPI
- Very Large Depth of Field (user selectable)
- Focusing: motorized, fine adjustable by software control
- Lighting: new “DC SynchroLight” system, LED based, (IR/UV free) active only during the scanning process provide for thousands of different light schematics
- Fine-Art scan mode: 3D image, post-scan light changes
- High grade precision and reliable mechanic
- 210x128cm holding table

### Main METIS DRS Software Features
- Native 64bit software and processing
- 16bit per channel (3x16bit) image processing
- Customizable user Profiles for workflow optimization and system settings retrieving
- Fast Preview for real-time adjustments
- Automatic Lighting calibration and Gray Balance tools; Full ICC color profiling support
- Color/density tools: exposure, contrast, highlight, shadows, gamma, automatic adjustments, black and white points, histograms and point analysis, ICC color profiles, paper color correction, etc.
- Unsharp masking, despeckle, deskew, gravenure filters, 3D texture, etc.
- Full Resolution image view immediately after the scan with History window, LOG file, etc..
- “Light Inspector” tools allow for real-time light schematic variations and evaluation
- Ability to save in Metis DCS-RAW format for image post-processing (include light variations and 3D)
- User customizable macro tools for automatic file labelling

### Workstation Minimal Requirements
- Latest Intel Processor
- 16 GigaBytes RAM
- Microsoft Windows 7 (64bit)