

World novelty

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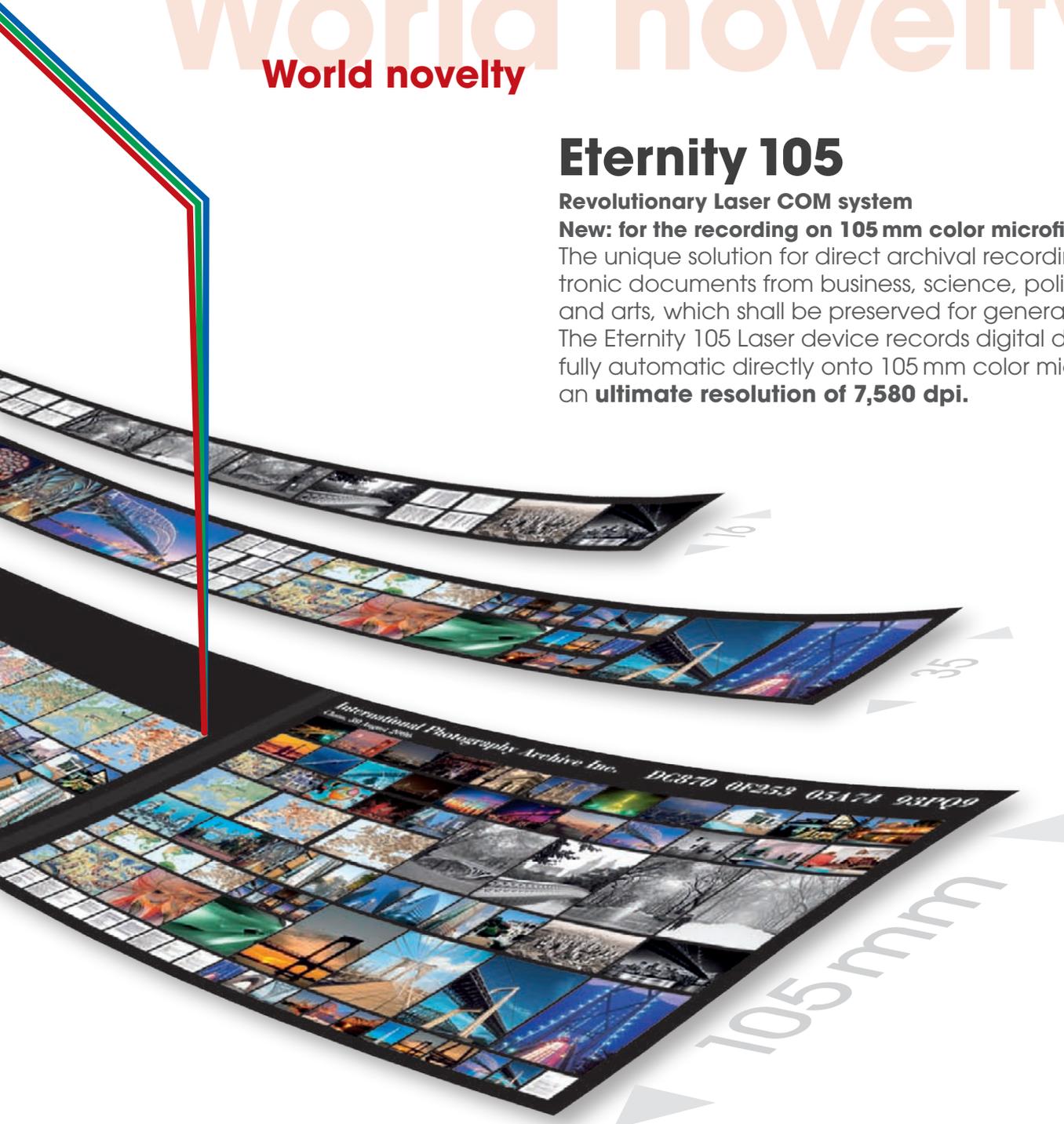
Eternity 105

Revolutionary Laser COM system

New: for the recording on 105 mm color microfilm

The unique solution for direct archival recording of electronic documents from business, science, politics, culture and arts, which shall be preserved for generations.

The Eternity 105 Laser device records digital documents fully automatic directly onto 105 mm color microfilm with an **ultimate resolution of 7,580 dpi**.



Before recording on the Eternity 105 the digital documents containing text, photos, drawings, etc. are prepared to optimally fit onto the microfiche format of 105 x 148 mm. Thanks to the superb recording density one single color microfiche offers a storage capacity of 3.6 GByte for digital data corresponding to 200 A4 color pages with an original 240 dpi without compromise in quality.

The Eternity 105 is very productive and records up to 400 microfiches per day hence providing safe archiving of as much as 80,000 A4 color pages per day.

Long-term archiving of documents

Part of the huge amount of digital data generated every day has to be archived for decades due to legal reasons or has to be preserved for centuries and for future generations. Unfortunately, the readability and lifetime of electronic storage media is limited to 10 to 20 years. In clear contrast, the color microfilm has a lifetime of up to 500 years and its content remains readable with simple optical means such as a scanner. The microfiche format of 105 x 148 mm has proven its suitability and longevity for archiving over decades long before the era of computer technology.

Recording technology

The Eternity 105 is the first Laser COM system for direct recording of digital documents onto 105 mm color microfilm. Its revolutionary technology ensures best recording quality and productivity. The new color calibration method ensures optimum color reproduction on the microfilm.

Operation at customer's site

The Eternity 105 is connected to customer's local network via Ethernet 1,000 connection and operates similar to a high end Laser printer. The GigaBit Ethernet connection ensures high enough data rate to feed the system with a stream of Tiff files for recording.

Layout of microfiches

On separate work stations the electronic documents are prepared and combined to fit onto the fiche format of 105 x 148 mm. Every final Tiff file of 3.6 GByte is dedicated for recording onto one color microfiche.

Productivity

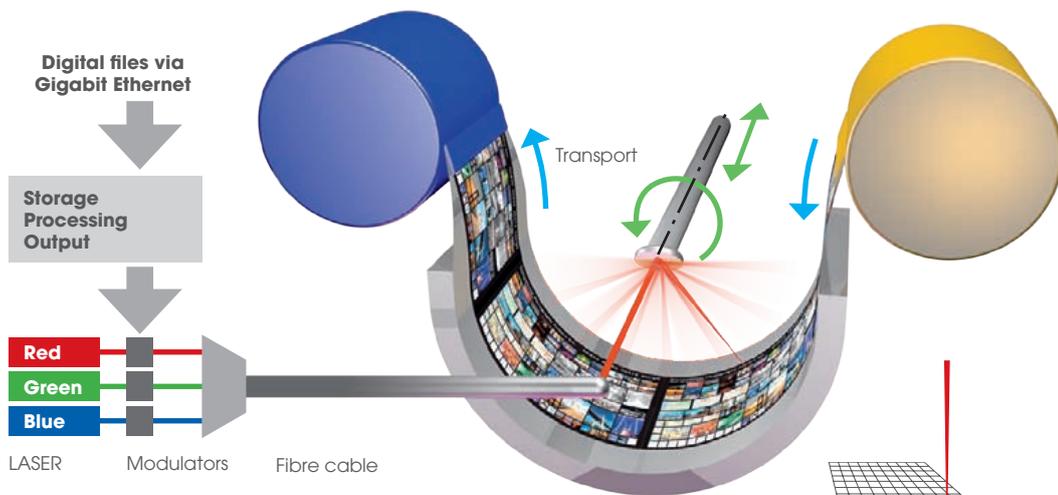
During a one shift working day 400 microfiches are prepared. The 60 m microfilm cassette enables recording of these 400 microfiches without reload of the film cassette, hence enabling autonomous recording of these 400 microfiches during 20 hours of operation of the Eternity 105.



A piezo-driven linear axis ensures ultra-precise movement of the scanning head. This high tech driving system with its nanometre step resolution is another unique feature of the Eternity 105.

Film roll with the exposed microfilm

Cassette with Ilford micrographic film



In the drum configuration, the focused Laser beam hits the film in normal incidence all over the exposure area. This ensures high resolution and consistent color quality without the compromising edge effects of photographic exposure systems.

The 7,580 dpi enable highest resolution and best image quality.

Swiss Patent



Technical Data	Eternity 105
Connection:	Gigabit Ethernet (1,000 Megabit/s)
File format:	TIFF 6.0
Technology:	LASER, RGB (3 x 10 bit)
Film format:	105 mm
Number of Pixels:	29,860 x 41,800
Resolution:	7,580 dpi
Colors:	RGB, 3 x 8 bit, Adobe 98
Film type:	Ilford micrographic film
Speed:	20 microfiches per hour
Productivity:	400 microfiches per day
Weight:	440 kg
Dimensions:	1'200 x 1'915 x 750 mm



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