The UltraScan5000 is a highly-automated photogrammetric scanner that produces digital images of uncompromising quality. Using a push-broom linear array approach called XY-stitching, the UltraScan5000 delivers superior radiometric performance and sharper image accuracy. All this and unparalleled scanning versatility at a cost much lower than that of its competitors.

Overview

The UltraScan5000 was designed by photogrammetrists for photogrammetrists. All scanner development is based on usability studies conducted in the field. High performance radiometry at 3.4D or better, excellence in color, geometric accuracy of +/-2 micrometers, high throughput rate of more than 1 MB per second, black & white and color capability, opaque material or transparency scanning, and negative—as well as diapositive scanning—are all standard features built into the UltraScan5000.

For unattended operation—24 hours a day, 7 days per week, year round—the system can be extended by the optional Automatic Film Roll unit (AFR). The optional Manual Film Roll unit (MFR) may also be added to allow selective frame scanning from uncut film rolls.

Throughput

The UltraScan5000 with AFR is capable of scanning in excess of 25,000 images per year in certain application modes. For example, a roll of 200 frames RGB at 20 micrometers can be scanned in less than a day. Amortization of the initial cost for acquisition of the UltraScan can usually be achieved with an annual rate of 500 scans. Please contact Vexcel Imaging GmbH for specific test scans and times.

Scanning of Archives

The AFR scanning software allows users to convert analog film archives into digital files for a variety of film formats and oversized images including 9" x 9" and 9" x 18". Please contact Vexcel Imaging GmbH for specific film formats.

Scanning aerial photography at 1700 dpi.
Overview (cont’d)

The UltraScan5000 is a “living” product with frequently introduced product enhancements. Scanning speed, for example, has significantly increased since the enhancement of the scanhead. Color film can now be scanned twice as fast with no compromise to precision or to color capability. Improvements to the scanning set up and work flow, as well many other features, are being added in response to the needs of experienced and sophisticated users.

The innovative and proven UltraScan5000 photogrammetric precision scanner provides superior performance and an amazing range of functionality at the best price-performance-ratio of all photogrammetric scanners currently offered on the market. Small wonder that the UltraScan5000 is the most widely sold photogrammetric scanner in the world today, with a market share far greater than any of its competitors.

The UltraScan5000 is the in-house scanning solution to help project managers gain control over project quality, schedule, and cost.

specifications

Weight & Footprint
• Base Unit: 70 kgs (150 lbs.) 93cm x 63cm x 34cm
• With AFR: 92 kgs (200 lbs.) 106cm x 63cm x 59cm

Geometric Specifications
• Accuracy +/- 2 micrometers
• Native resolutions: 16 source pixel sizes, built from two native optical resolutions at 5,080 dpi and 882 dpi

Radiometric Specifications
• Density Range of 0 to 3.4D
• Uniformity better than 1 DN at 8 bits, and at 1.0 D
• One pass color

Source Material
• Color or black & white images
• Transparent or opaque
• Positive or Negative
• Continuous tone or line art

Scanning Size (Standard Scanner)
• 13in. x 17in., 280 mm x 440 mm at 5,080 dpi
• 330 mm x 440 mm at 882 dpi

Computer Environment
• Windows NT/2000/XP, Intuitive GUI
• SCSI-II Connection to host

Output
• Freely selectable resolution between 50 dpi and 10,160 dpi
• Data format: TIFF, Tiled TIFF, JPG, RAW
• 8 and 16 bits