GE Film Digitizer FS50 / FS50B

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are designed to provide high-end performance in film digitizing, offering superior quality at high throughput. The steel housing gives the robustness needed for the industrial environment of NDT applications. All standard film formats can be digitized, up to a width of 14 inch (35 cm), without length limitation in any resolution between 50 µm and 500 μ m. The FS50B is the first and only digitizer on the market that can handle the full density range (D = 0 up to 4.70 D) in one working range with the requested contrast sensitivity. This makes the scanner meet the requirements for class DS film digitizers, according to EN 14096 part 2. This classification has been evaluated and confirmed by BAM, the German Federal Institute for Materials Research and Testing.

The system employs a HeNe laser beam, which sweeps across the film by a polygon mirror system. The F-Teta lens avoids distortions of the image, by keeping the optical distance of the laser beam unchanged at all spots of the scanned area. The logarithmic amplification process guarantees high signal to noise ratios up to 4.70 density (FS50B).







Every scanner is calibrated and characterized at the time of shipment, and a unit-specific LUT is delivered with each machine. This guarantees an artifact-free scanning at the highest possible precision, repeatability and speed. A 14×17 inch film can be digitized in as little as 7 seconds.

The cost-effective film digitization solution for anyone handling archives, for easy image transfer or for using the advanced viewing features of the GE Inspection Technologies system.



Light source HeNe laser 632.8 nm

Laser scan resolution 50 μ m to 500 μ m in steps of 1 μ m

Density range FS50 0.05 to 4.0 D
Density range FS50B 0.05 to 4.7 D

Scan speed 14×17 inch: 7 sec (Speed mode, 200 μ m)

 14×17 inch: 120 sec (Quality mode, 50 µm)

Pixel depth 12 bit (4096 gray levels) logarithmic

Film size Min: 60 mm - 2.4 inch width

Max: 355 mm - 14 inch width

Weight 45 kg

Dimensions 526 x 764 x 330 mm - 13 x 21 x 30 inch

Interface SCSI, SCSI II

Power 100 - 120 V; 200 - 240 V

50 / 60 Hz; 400 W

Safety labels CE, UL, GS

Operating condition $15 - 30 \,^{\circ}\text{C} (59 - 86 \,^{\circ}\text{F}), 30 - 75\% \, \text{RH}$ Storing condition $10 - 40 \,^{\circ}\text{C} (14 - 104 \,^{\circ}\text{F}), 10 - 90\% \, \text{RH}$ Transportation condition $10 - 50 \,^{\circ}\text{C} (14 - 122 \,^{\circ}\text{F}), 10 - 90\% \, \text{RH}$



