



Printing method: On-demand inkjet  
 Printing direction: Bi-directional with logic seeking;  
 uni-directional printing (left to right) in the bit image  
 modes  
 Print head nozzle count: 24  
 Character set: Full 96-character ASCII with 11  
 international character sets  
 Printing speed: letter-quality text – 105 cps;  
 normal text – 176 cps  
 Paper: Cut paper (182 – 364 mm);  
 fan-fold paper (139.7 – 406.4 mm) when  
 using the optional tractor unit  
 Paper-feeding: Friction feed, adjustable sprocket pin  
 feed (with an optional tractor feed)  
 Dimensions: (W) 595 x (D) 383 x (H) 165 mm  
 Weight: Approximately 18 kg

### Product Features

The IP-130K inkjet printer was commercialized as Epson's first non-impact printer in June 1984. In October 1984 it was introduced outside Japan, where it was known as the SQ-2000. The SQ-2000 can rightly be called the original model for today's Epson inkjet printers. It was an on-demand inkjet system that fired ink droplets where needed on the page, and piezo elements were used in the print head. The SQ-2000 attracted considerable attention for its comparatively low price as well as for its features. As a business machine it offered the three essential features of low noise, high speed, and clear print. The SQ-2000 was a monochrome printer that used one color of black ink, which was stored in an off-carriage cartridge. The print head was made of glass and had piezo elements measuring 120  $\mu\text{m}$  in thickness. The 24 nozzles in the print head were arranged in a 12 x 2 array, with the position of the nozzles alternately staggered. Introduced at a time when monochrome text printers were the mainstream and before there were high-nozzle-count inkjet printers, the SQ-2000 was a revolutionary, trailblazing product.

### Background

Epson built a strong position in the dot-matrix printer market with the highly popular MX-80, but in 1978, around the time the MX-80 was being developed, the company had already begun developing a non-impact printer that would meet needs for silence and high resolution. During the course of investigations into various printing methods, on-demand inkjet printing caught the attention of the Epson engineers. Then in October 1982, Epson succeeded in developing the IP-100, a prototype inkjet printer that featured an original method of preventing nozzle clogging. This anti-clogging mechanism made it possible to use a special quick-drying ink that boosted both printing speed and print clarity. Commercial development proceeded apace, with a 24-nozzle head reduced to a mere one-ninth the size of previous heads even as costs were drastically reduced. Finally, in June 1984, Epson launched its first commercialized inkjet printer in Japan, the IP-130K. This was known as the SQ-2000 outside Japan.

### Impact

The SQ-2000 was the first in what would become an extensive line of inkjet printers, as Epson went on to market a series of units for PCs and so forth. Thereafter the company continued to improve its piezo system technology. The SQ-2000 has left a legacy of technology that continues to this day: modern inkjet printers share the same basic structure and many of the same technical principles that were used in the SQ-2000.