Meeting the growing demand for top security laser engraving technology, Matica gives you a reliable solution, engineered to provide the highest security available on the market, preventing counterfeiting, fraud and forgery. Matica laser engraving system delivers everything you’ve come to expect from a high quality product: excellent precision, performance and reliability.

**ENHANCED SECURITY**
As a permanent, aesthetic and non-damaging solution used in document personalisation, laser engraving has enhanced significantly the level of card security. This professional process doesn’t allow information to be mechanically or chemically removed without damaging the card’s surface and body.

**RELIABILITY**
Thank to the many advantages arising from its robust and industrial design held in a compact unit, it operates in a professional application environment. This compact machine incorporates most of the S7000 characteristics. Among many advantages users will avail of a continuous and precise power control with low power consumption, the air cooling system and a high quality laser beam. The S5000L simply stands out by its long term power & high thermal stability, as well as air-thermostable fan cooling system. Laser source lifetime also means low maintenance overhead with an average lifetime of over 20,000 hours (MTBM).

**EXCELLENT PRECISION & PERFORMANCE**
The S5000L solution is ideally recommended for a mass professional debit cards applications (using PVC laserable cards), secure corporate cards (marking barcodes or logos), or secure government ID polycarbonate cards where logos, alphanumeric characters and pictures are requested. Its full digital control loop allows to tune and to optimise many parameters to achieve high quality results. MaticardPro Software allows personalization of text, barcodes, and pictures in any combination, any position and in any dimension on the nearly entire card surface*.

* Less than 4% card surface is not available for personalization.

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### TECHNICAL SPECIFICATIONS

**Productivity**
- **Speed:** depending on card type and printed layout

**Card Handling**
- Input/output hopper capacity: 600 cards
- **Card format:** ISO Std. CR80 - 0.50 - 0.80 mm

**Card Personalization**
- **Resolution:**
  - up to 1200 dpi on laserable cards (ideal for debit card applications) and depending on job and speed desired.
  - up to 2400 dpi on polycarbonate cards (ideal for ID card applications) and depending on job and speed desired.
- Magnetic stripe encoding: HiCo/LoCo – std. tracks 1, 2 & 3 (ISO/IEC 7811)
- Front & rear engraving: integrated open-view flip-over

**Options**
- Single Contact Encoding Station
- Single Contactless Encoding Station
- Air Vacuum

**Communication Interface**
- LAN Ethernet 10/100 Mbps (laser device connection)
- USB (PC connection for SW application)

**Software**
- MaticardPro Windows-based software included
- Diagnostic and setup software included

**Other Specifications**
- **L x W x H:** 70 x 55 x 70 cm
- **Weight:** 57 kg
- **Cooling:** actively stabilized by ‘Thermo-Electric Cooling’

**Electrical Requirements**
- **Power supply:** 100 to 240 VAC (+/- 10%); 50/60 Hz (+/- 3 Hz)
- **Operating temperature:** 15 - 35°C (46 - 95°F)

**Laser Specifications**
- **Nominal power:** 20 W
- **Wavelength:** 1064 nm
- **Pulse repetition frequency:** 0 - 100 kHz
- **Pulse stability (%%):** > 90 %
- **Beam quality factor M2:** < 1.5
- **Lifetime MTBM:** > 20.000 h
- **Beam expander:** dynamic control of the fire spot
- **Power laser sensor:** direct monitoring of diodes and optical power output