

FIREMARK™

LASER CODER



- Small, Smart, Sophisticated
- Lower Maintenance and Downtime
- IP65 Laser Module
- Permanent, Tamper Proof Codes
- Mark-On-The-Fly
- No Clogging or Messy Solvents
- Eliminates Costly Inks
- Plug-In Service Module
- Red-Dot-Pointer
- The Industry's Smallest Laser Head
- High Quality Optics
- Vector Steered Beam
- Water and Dust Tight Laser Head

Lower Cost of Ownership

Laser coding improves your bottom line. How? By eliminating the substantial, recurring costs of ink. And unlike inkjet technology, which can frequently clog, laser coders require little maintenance.

Secure, Permanent Codes

Laser coding is a flexible, non-contact means of providing direct, permanent codes on products. Tampering of ink-based date codes and counterfeit products are driving more manufacturers to use permanent, laser-generated codes. Recent regulatory changes require permanent, tamper-proof codes to thwart these illegal activities.

Installs Easily, Simple to Use

The **FireMark** installs on production lines with minimal bracketing, shielding or disruption to surrounding equipment. With the **FireMark's** familiar drop-down menus and pop-up windows, job setup is simple and intuitive. There is no need to memorize cryptic menu-driven alpha sequences on tiny displays. The **FireMark** eliminates guess-work with its 15-inch, high resolution, color graphics touchscreen. What you see is exactly what gets marked. And a pointing beam makes code alignment fast and convenient.

Crisp, Clean Codes

Unlike ink-based codes, laser codes do not smudge or fade. The **FireMark's** optical design produces a more sharply focused beam, which results in crisper, cleaner codes. Whether you need to code complex characters or require high resolution codes, you can count on **FireMark's** high quality optics and smooth vector-steered beams to achieve the highest coding quality possible. And a sharply focused beam generates greater energy densities, enabling faster coding speeds.

Straightforward Yet Sophisticated

Job setup is straightforward with **FireMark's** intuitive, feature-rich command set. Drop in text, serial numbers and bar codes with the click of a mouse. Generate any True Type fonts, including Asian and European characters. Orient them horizontally, vertically or radially. A vast library of single- and two-dimensional bar codes covers most bar code applications. Auto time, date and serializing allow for a myriad of coding possibilities. **FireMark** also contains powerful functions such as text merge, which can be accessed via a remote database through a network connection. Or import and execute one of many filetypes. **FireMark** offers remote control and monitoring through a networked interface.

Size Does Matter

With the smallest laser head in its class – up to 85% smaller than other coders – the **FireMark** can install where others cannot. It easily fits in place of inkjet heads and can be positioned in the tightest areas of your production line.

Advanced, Rugged Technology

The **FireMark** is designed to be small, lightweight and rugged. Its patent-pending, V-folded, ceramic laser tube improves power stability. Only **FireMark** integrates the laser, scanners and optics into a single frame construction, eliminating structure and drastically reducing size. Compact laser scanners, with a unique high torque design enable **Firemark** to position the laser beam quickly and accurately a thousands of millimeters per second.

Service in a Snap

Compared to inkjet, laser coders require little maintenance. There are no pumps, valves or nozzles to clog or fail. And the **FireMark's** patent-pending plug-in module allows serviceable components to be swapped out with just a screwdriver in less than 5 minutes. And since all application-specific software settings remain intact within the system's memory, there's no need to reprogram on startup.

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Technical Data

Laser Type and Power

10 Watts Sealed CO₂

Aiming and Pointer Beam

Red 650 nm Laser Diode

Marking field (mm)

70 x 70 (105 x 105, 50 x 50)

Character Size

0.5 mm up to full field;
140 (210, 100, 70) Lines of 0.5 mm Text

Speed

Up to 700 characters/sec., 91 m/min.
(Font and Substrate Dependent)

Shutter

Electro-Mechanical Safety Shutter
and Shutter Sensor

Inputs

Start Sensor, Start Switch, Interlock,
E-Stop, Quadrature Encoder,
6 User Inputs

Outputs

5 and 24 V DC, 6 User Outputs,
Fault Alarm, Ready, Mark-In-Progress,
Warning Indicator Beacon

Communication Ports

RS-232, Ethernet, USB,
8 Rear Panel Diagnostic LEDs

Software Features

Import Graphic Types: PLT, DXF, EMF,
CMX, AI, SVG, BMP, JOB, MCL, PCX;
Fonts: Any True Type Fonts, Asian,
Laser Fonts, Hatched, Bold, Italic,
Vertikal, Horizontal, Radial;
Remote External Control of Software
Features through Ethernet-Port (opt.);
Auto Date, Auto Time, Serialization,
Text Merge, Batching, Arraying,
Several Hatching Algorithms,
Any Language Can Be Supported,
Many Bar Code Types (incl. 1 & 2-D),
Mark-On-The-Fly

Standard Coder Software Features

Auto Date, Auto Time, Serialization,
Standard Hatching, Any True Type
Fonts, Asian, Laser Fonts, Bold, Italic,
Vertical, Horizontal, Radial

Advanced Coder Software Features (Upgrade Option):

Standard Coder Software Package Plus:
Many Bar Code Types Including 1 & 2-D,
Addition of Graphics Capabilities,
Remote External Control of Software
Features through Ethernet-Port, Text
Merge, Batching, Arraying, Advanced
Hatching Algorithms, Mark-On-The-Fly

Laser Head

375 x 88 x 103 mm, 8.6 kg;
Conduit Cable: Liquid Tight, Metal
Shell (3.1 m); Housing: Painted
Steel or Optional Stainless Steel

Control Kiosk Specifications

15" WYSIWYG Color LCD Touch
Screen with XGA Resolution,
366 x 430 x 460 mm, 19.5 kg
Switches/LEDs: Laser Off/Ready Key,
Start, Emergency Stop, 6 Operator
Status LEDs

Options and Accessories

Laser Diode Pointing Beam,
Stainless Laser Head Cover,
Remote External Control, Graphics,
Bar Codes, Laser Head Mounting
Kit, Kiosk Pedestal, Start Sensor,
Speed Sensor, Warning Beacon

Environmental

Laser Head: Water/Dust Tight,
Optional IP-65 Rated;
Control Kiosk: IP-54 Rated;
Electrical: 95–260 VAC, 50/60 Hz,
150 Watts Typical, 350 Watts Max.;
Temperature and Humidity Range:
5–30° C, 10–95 % N. C.

Regulatory Approvals

TÜV, CE, CDRH

