

Laser Marking Specialist



KARAT MARK

Fast precise laser marking specialist for marking on finished jewellery articles and other parts using modern powerful fiber laser beam technology

KaratMark, a well known brand in desktop laser marking system is unique, fast and precise unit for marking on finished jewellery and other parts.

Quantum Equipment with its experience for more than 2-decades in X-ray and laser technology always introduces innovations with latest hardware technology, intuitive software package, simplicity in operations at affordable cost. The company is continuously improving on the established laser techniques for compact, fast and flexible marking solutions.

KaratMark is the ultimate solution for precision marking on all types of metals and plastics. Extremely compact, modular and perfectly sealed integrated design for easy in-house and industrial marking applications. Its modular design allows integration into a production line by easily interfacing to an existing system. The laser is maintenance free with simplicity in replacement of laser diode and other parts due to modular concept.

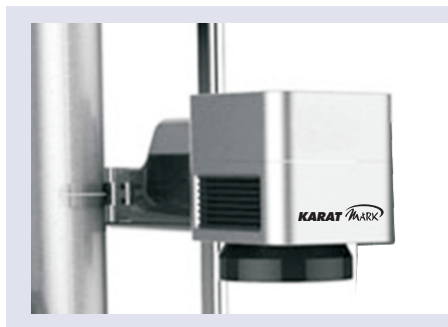
The heart of system "fiber laser module" is long life

compact with ultra-fast scanning unit and instant changeover facility is available without need for realignment. External red laser pointer is integrated to scanning head to focus correct distance for marking. This unique feature achieves the correct focus distance without any external tool for both on simple and curved parts. The laser head is completely sealed, pre-aligned and assembled in clean room without need for further maintenance. The marking system offers long-life fiber diode lasers with different capacities.

KaratMark together with flexible WIN based operating software is complete laser system ready to mark in the concept of what you see is what you get. The software consist all marking functions including True Type Text, Serial Numbers, Bar Codes, Data Matrix, UID, Graphics with parametric and axis handling, etc. Special software features for hallmarking application are included as per customer's needs for flexible operations. Extensive R&D facilities has lead to a Gaussian profile with the highest beam quality for precise and fast marking.

Technical Specifications

Parameter	Model KaratMark
Laser Source	Fiber Diode Laser
Average Power	10W & 20W
Wavelength	1064nm
Beam Quality	M2<1.4
Pulse Repetition	20-100kHz
Pulse Width	80-140ns
Marking Area	70x70mm, 110x110mm
Marking Speed	600 characters/sec
Marking Operation	Foot Switch or Function key
Preview Focus	External red laser pointer
Scanner	High Speed 8mm mirror
Cooling System	Integrated Air cooled
Power Supply	110/230VAC, 50/60Hz, 150W
Dimensions	215x287x93mm (WxDxH)
Weight	18kg



Laser Marking Applications

- **Automobile:** bearing, piston, gears, clutch liner, shaft, cylinder, nozzle, pins, plug, plates, filter and other parts
- **Jewellery:** hallmarking, logo and brand building, designing, engraving, pictures etc.
- **Electronics:** ICs, capacitors, ceramic and film resistors, PCB, switches, solenoids, hybrid circuits and flexible boards
- **Medical:** orthopedic implants, surgical instruments, artificial joints, valve, rods, screws, nails and clamps etc.

All configurations and specifications are subject to change without notice.

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