

A Revolution of Reliable - Simple – Powerful – Affordable Laser Marking

Direct from the original developer and manufacturer of Dot Matrix Laser Marking Systems

Key Benefits

Visit us at: www.DPILasers.com

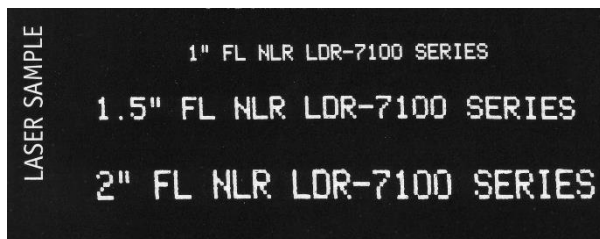
- New **L**aser **D**igital **R**esolution with Enhanced High-Res Mark Quality
- Long Laser Tube Life with Easy User Drop-In Replacement Design
- High System Reliability and Performance Capability Range
- Straightforward User installation, Operation and Maintenance
- Highest Laser Power and Marking Speed in the Industry
- 5 DOT, 7 DOT or 9 DOT Character Vertical Definition with High-Res Option
- Complete System in TWO Cabinets
- "BLACK" 10.6 μ - "RED" 10.3 μ or "BLUE" 9.3 μ Laser Wavelengths
- One or Two Line Marking
- Easy Cooling with Ambient Air, Compressed Air or Closed Loop Water

"LDR 7100"

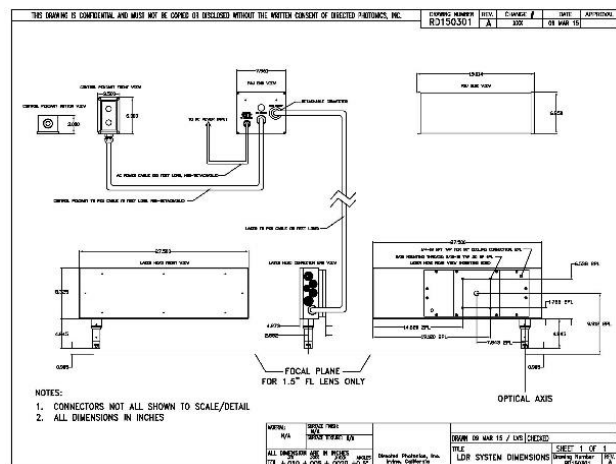


Key Features

- High Efficiency, 5, 7 or 9 Channel Direct Digital Coding
- No Moving Precision Optical Parts or Consumables
- Long and Highly Flexible Umbilical
- A state-of-the-art evolution of the highly successful DDC3 laser marking system taking laser marking to new levels of reliability and ease of use. Completely redesigned electronics and User Interface.
- A unique new system control computer delivers enhanced marking performance and unrivaled user reliability without the use of Windows or Linux operating systems.
- Data Entry and Display – Detachable wired/wireless: Laptop, PAD or Smartphone



LDR Laser Digital Resolution Mark



LDR System Drawing

DPI LDR Series Technical Specifications (Preliminary)

System Features:

- High speed all-digital laser marking system
- 200 Watt nominal laser peak power (7 Laser System). 5 and 9 Laser Models Available
- State-of-the-art communication interface (USB/PAD and Smartphone)
- 2 Cabinet IP65 System, laser printer and power supply
- Enhanced RF stability and cold start-up performance
- Advanced RF-pumped laser tube technology
- 9.3-micron, 10.3-micron and 10.6-micron laser wavelengths available
- Optimum laser marking on PET plastic (@9.3-microns)
- Plug and play laser modules
- USB and RJ45 control interfaces including Laptop, PAD and Smartphone user interface

Printing Features:

- Lines of Text: One or Two
- Character Generation Up to 2,000/sec (single Line) or 4,000/sec (two line) with standard lasers
- Line Speed Up to 250m/min standard lasers (substrate dependent)
- Print Formats 5x5, 5x7, 5x9, 7x5, 7x7, 7x9, 9x5, 9x7, 9x9 Laser Digital Resolution, Enhanced Lens Option
- Character Height Range: 2.0mm up to 10mm (0.08" up to 0.40")
- Message Length Up to 253 characters per message
- Message Storage 256 complete messages

Electrical Requirements:

- Voltage/Current 120 VAC, 15 A maximum and 12 VDC via the LDR power supply system
- Laser printer control signals Computer controller imbedded in laser printer head
- Laser enable/control connection via laser head 25-pin connector
- System interlocks via laser head 9-pin connector and system control pendant

Laser Tube Specifications:

- Laser Type: Sealed Co2 RF Excited, 0 Gas Consumption
- Laser power output 20-watt min, 25-watt nom. and 30-watt max. (wavelength dependent)
- Laser wavelengths 10.6-microns, 10.3-microns or 9.3-microns
- Laser beam diameter/divergence 4.0/3.5 (mm/mrad) nominal
- Laser mode quality >95% TEM₀₀ electric field purity
- Laser rise/fall times (nominal) 100 µsec /150 µsec nominal, 80 µsec /115 µsec high speed
- Maximum marking duty cycle 100%
- Maximum laser bore temperature 55 degrees C
- Maximum laser power droop w/temp. <20% of nominal at 55 degrees C
- Laser lifetime (nominal) 80% of nominal laser power at 20000 hours
- Gas refill capability Laser Tube Reprocessing at factory only

Mechanical Specifications:

- Dimensions: Laser Head: 693mm (27.3") long, 203mm (8.0") wide, 81mm (3.2") deep
Power Supply: 475mm (18.8") long, 203mm (8.0") wide, 170mm (6.7") deep
Control Pendant: 150mm (6.0"), 170mm (6.8") wide, (3.0") deep
Laser Head: 18kg (40lbs), Power Supply: 11.4kg (25lbs)

Weight:

System Installation:

- Interlock, fault and remote disable Via LDR Control Pendant and 9-pin laser head connector
- Laser computer print control Integrated into laser head
- Input cooling specification Laser Head: (Water, Ambient or Compressed Air, duty cycle dependent)
- Power Supply: Cooling Fan Pack
- Water-cooled option: >4 l/min (1 gal/min) @ 10-30°C (50°F – 86°F)

Warranty:

24 months parts and labor-return to DPI

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