

# PowerLine Prime Series

# Cost-Effective Laser Marking

PowerLine Prime laser markers are entry-level sub-systems designed to meet the requirements of many standard marking applications, delivering an unmatched mix of economy, mark quality and speed. They are based on an air-cooled, diode-pumped solid state laser, and their compact design facilitates system integration. PowerLine Prime can be configured with an f-Theta lens having either a focal length of 160 nm or 347 mm. Two different models are available. PowerLine Prime 12 delivers a fundamental mode beam, while the PowerLine Prime 15 produces a multi-mode beam. The PowerLine Prime 12 PC is specifically optimized for greyscale marking of plastic cards.

## **FEATURES & BENEFITS**

- Excellent control of marking quality
- Compact size
- Laser positioning help
- · First-pulse suppression feature
- Powerful VLM marking software
- Greyscale marking software (only PL Prime 12 PC)

### **APPLICATIONS**

- Marking of Organic Materials
- Annealing Marking
- Greyscale Marking (PL Prime 12 PC)



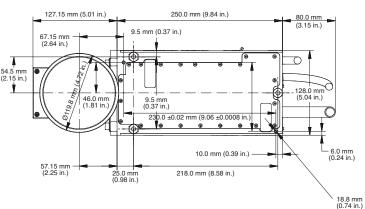


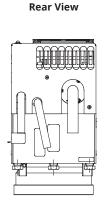
MODEL	PL Prime 12	PL Prime 12 PC	PL Prime 15
Laser Type	YVO <sub>4</sub>	YVO <sub>4</sub>	YVO <sub>4</sub>
Wavelength (nm)	1064	1064	1064
Average cw Power (W)	8	8	14
Average Power (W)	8 (40 kHz)	8 (40 kHz)	13 (50 kHz)
Frequency Range (kHz)	cw, 10 to 200	cw, 20 to 80	cw, 20 to 200
Pulse Width (ns)	7 to 12 (40 kHz)	7 to 12 (20 kHz)	9 to 14 (20 kHz)
M <sup>2</sup>	1.3	1.3	2.5
Cooling	Air	Air	Air
Control System	RCU-ITX	RCU-ITX	RCU-ITX
Marking field (mm)			
f-160 mm objective	120 x 120	120 x 120	120 x 120
f-347 mm objective	240 x 240	240 x 240	240 x 240

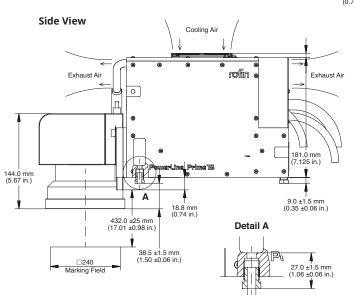
# **MECHANICAL SPECIFICATIONS**

#### **PowerLine Prime 15**

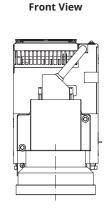
#### **Bottom View**







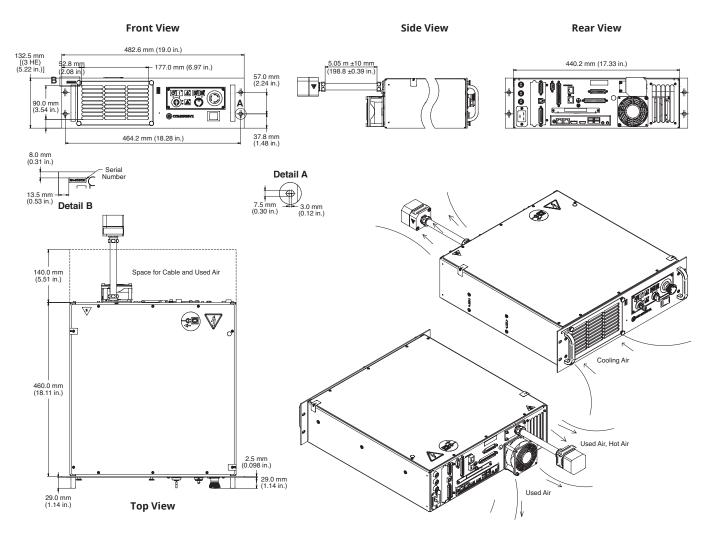
Ø6.5 mm (0.26 in.)





#### **MECHANICAL SPECIFICATIONS**

# **PowerLine Prime Power Supply**





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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all PowerLine Prime Series Lasers. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative. MC-XXX-20-0M0120 Copyright ©2020 Coherent, Inc.