# HIGH-POWER FIBER LASERS AND AMPLIFIERS

L40 & A40



Leonardo's fiber amplifier is the core building block for fiber laser systems. Leveraging Leonardo's fully integrated US-based manufacturing line, our products are engineered to reliably deliver world-class performance.

## **KEY FEATURES**

- Industrially and military rugged
- Configurations available for spectral or coherent beam combination
- Low size and weight
- Long operating lifetime
- Integrated electronics and controls
- · Easy to use interface

### **KEY BENEFITS**

- Narrow linewidth
- Single mode fiber output with typical M<sup>2</sup> of 1.1
- CW operation with 2.5 kW output power
- Tunable output power

## **KEY APPLICATIONS**

- Directed Energy
- Defense
- Industrial
- Beam Combining Spectral and Coherent
- Power Beaming
- Sensing



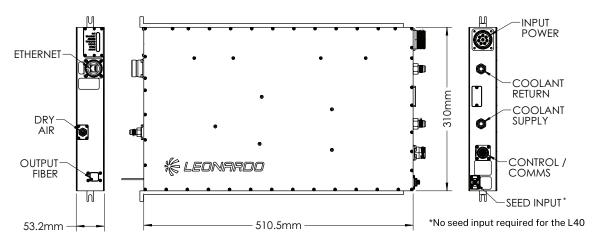
# TYPICAL FIBER AMPLIFICATION SPECIFICATIONS

Product Type		Fiber Amplifier	Fiber Laser
		A40	L40
Parameters (at 20°C)	Units	Typical Value	Typical Value
Optical			
CW Input Signal	mW	15	NA
Input Signal Polarization		Random or Depolarized*	NA
CW Maximum Output Power	W	2500	
Power Stability	%	±2	
Input Signal Wavelength Range	nm	1050-1080	
Input Signal Linewidth (3dB)	GHz	25	NA
Output Signal Linewidth (3dB)	GHz	25	
Electrical-Optical Efficiency	%	>30	
Beam Quality (M²)		1.1	
Mechanical			
Package Mass (dry)	kg	13	
Package Dimensions, L x H x W	mm	510.5 x 310 x 53.2	
Delivery Fiber Length	m	1	
Coating Diameter	μm	550	
Clad Diameter	μm	400	
Core Diameter	μm	25	
Input Specifications		·	
Voltage (DC)	VDC	270	
Maximum Current	Α	28	
Communication		RS232/485	
Cooling Type		Filtered Water/PGW	

<sup>\*</sup>Linear polarization available

Leonardo prioritizes ongoing product development and strives for constant improvement. We reserve the right to modify specifications without prior notice.

# **MECHANICAL SPECIFICATIONS**



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