

# COMPACT Diode Laser System 12/400 (12W, 400µm)

## Features

Easy-to-integrate system features conduction cooled diode laser modules and consists of a compact 19" (4 HU), rack-mountable chassis, metal-armoured fiber and imaging optics with protection glass. Can be combined with DILAS' processing heads offering camera and pyrometer options, and allowing the closed-loop operation of the system in pre-defined temperature ranges for quality relevant applications in medical device manufacturing and automotive. Available with an optional fiber-input galvo scanner featuring a field of operation in which the laser spot can be freely addressed.



## Device Specification

Optical	Units	
Optical Output Power	W	12
Wavelength <sup>1</sup>	nm	1470
Wavelength Tolerance <sup>1</sup>	nm	± 20 <sup>1</sup>

Pilot Laser		
Wavelength	nm	650
Output Power	mW	<1

Fiber Parameters		
Fiber Connector Type		SMA 905 with Free Standing Fiber Tips
Fiber Length <sup>1</sup>	m	5
Numerical Aperture	NA	0.22
Fiber Core Diameter	µm	400

Electrical Parameters		
Operating Voltage	V	200-240 Single Phase
Frequency	Hz	50/60
Power Consumption	kVA	0.77
Overall Efficiency	%	>3
Max. Rep Rate	Hz	500
Min. Pulse Width	µs	200
Min. Rise/Fall-Time	µs	150

Thermal Parameters		
Temperature Ambient in Operation (100% duty cycle)	°C	15 to 35 (Non-Condensing)
Storage Temperature	°C	5 to 50

Mechanical		
Dimension [w x h x d]	mm <sup>3</sup>	176 x 483 x 500
Weight	kg	25
Noise Emission	dB(A)	<70

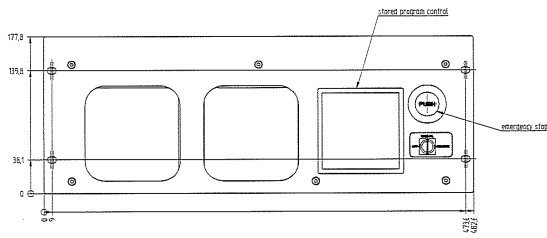
## Package Includes

<sup>1</sup>COMPACT laser unit: fiber with 5m length<sup>1</sup>, 2 warning lights and focusing unit PHFS0 (f= 100mm). Consult the COMPACT Series Operating Instruction Manual for additional information.

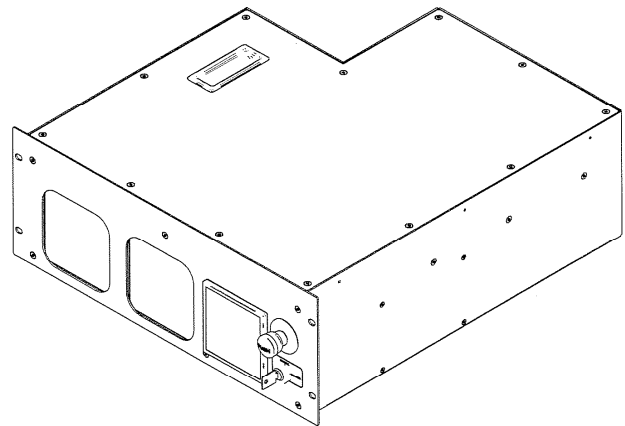
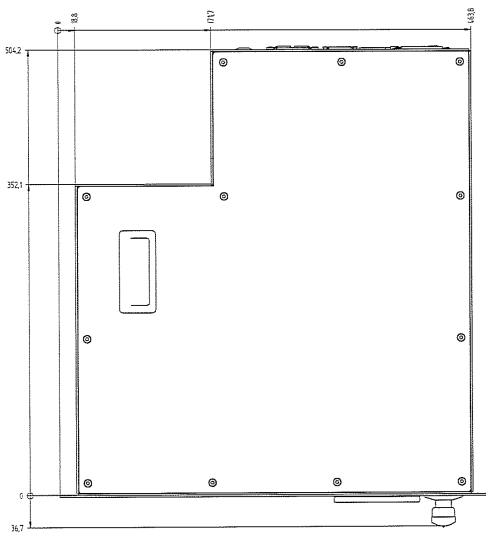
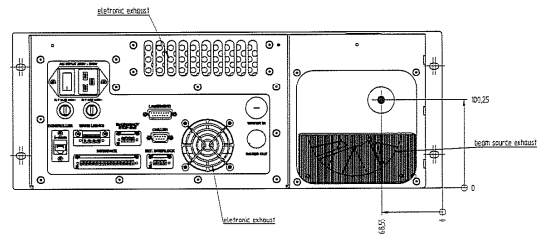
<sup>1</sup>Consult DILAS Industrial Laser Systems for other available options.

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## Package Dimension



Rückseite / rear side



### U.S. CFR Regulation

The manufacturer and subsequent sale of laser equipment is under the guidelines governed by the U.S. Center for Devices and Radiological Health (CDRH). In accordance to those guidelines, specifically Subchapter J of the Radiation Standards, 21 CFR, the diode laser is registered as a CLASS 4 laser product.

### European Commission

In accordance to EN 60825, Safety of Laser Products, the diode laser is registered as a CLASS 4 laser product.

Products specifications are subject to change without notice. For handling precautions, please reference the general handling instruction manual. For additional information, please contact your local sales representative or visit our website at [www.dilas-ils.com](http://www.dilas-ils.com).

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# 400µm Fiber, NA 0.22, SMA/SMA

## Features

- Free standing fiber tip
- High centricity

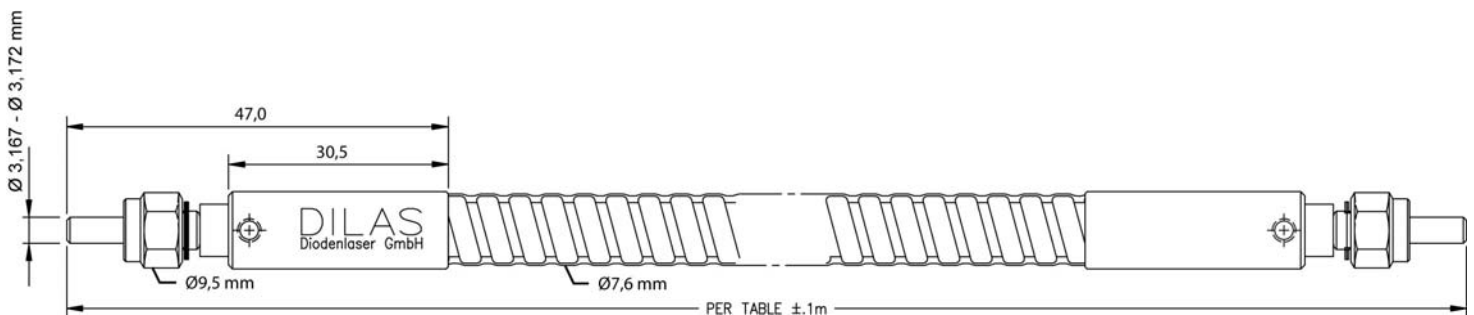


## Device Specification

Parameter	Units	
Connector Type		SMA 905 Both Sides, with Free Standing Fiber Tip
Ferule Diameter	mm	3.167 – 3.172
Outer Diameter <small>(Largest Diameter at Connector)</small>	mm	9.5
Cable Diameter	mm	7.6
Fiber Length <sup>1</sup>	m	2 or 5 ± 0.1
Numerical Aperture	NA	0.22 ± 0.02
Core Diameter	µm	400 ± 8
Cladding Diameter	µm	480 ± 10
Centricity	µm	<6
Long Term Bending Radius (Coil Radius)	mm	min. 96
Short Term Bending Radius	mm	min. 48

<sup>1</sup>Others on request.

## Package Dimension



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