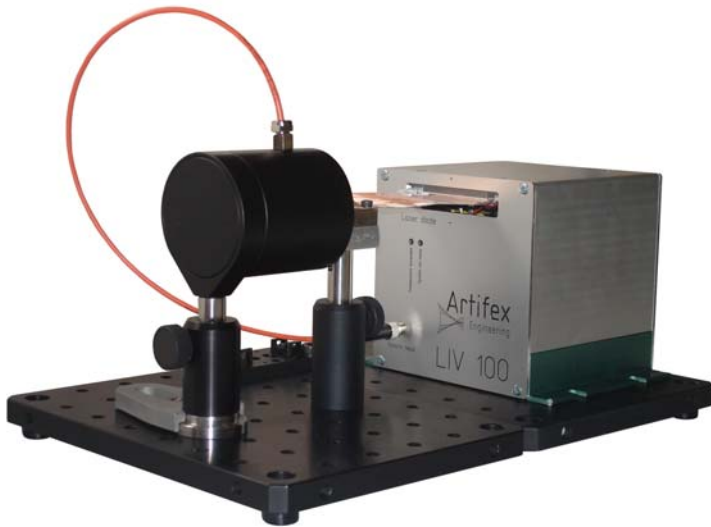


LIV in the fast lane!

Laser Diode Test System LIV100



Highlights:

Strong: up to 200A

Fast: 25ns rise time

Flexible

Our offer in Detail:

The LIV100 is a powerful test system for use in the lab as well as for OEM applications, ideal for

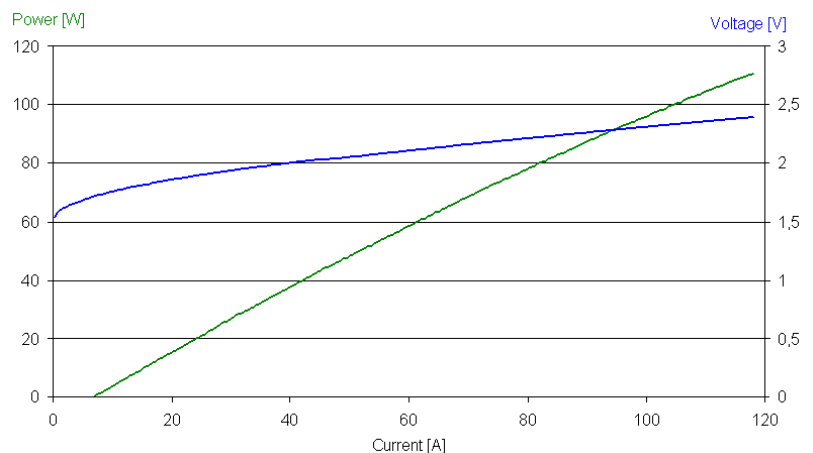
- Diode characterization at the chip or bar level
- Quality control of incoming goods
- OEM

We offer this instrument with a variety of end stages covering the current ranges 0-40A, 0-120A, and 0-200A.

A complete parameter set for a given measurement protocol may be uploaded to the LIV100 followed by a start command. The LIV100 then takes over the measurement procedure beginning with a test of proper laser contact. Once this preliminary test is passed, the unit drives the laser with the given prescription and performs the data acquisition and storage. Many laser diodes of the same type may now be tested in this manner with very high throughput. The measurement cycle takes roughly 120ms for 100 current steps including the data transfer to the host computer.

Specifications

- Current: up to 200A
- Rise time: <25ns
- USB-controlled via command list



Your problem is our challenge – flexibility is our standard:

We will gladly adapt the wavelength or the casing to suit your application. Let us know your requirements.

Ordering Information

Order code: LIV 100 c

	Options	Description
Maximum Current (c):	40	40A
	120	120A
	200	200A



Please contact us for customized units.

Specifications

PARAMETER	CONDITIONS	RESOLUTION	MIN	TYP	MAX	UNITS
INPUTS: 2 x Transimpedance amplifier (1 x reserved for power input, 1 x free e.g. for monitor diode) 4 x A/D converter (2x reserved for current and voltage inputs, 2 x free for further signals)						
Sampling rate	selectable: 20/n MS/s with n = 1 .. 20	n.a.	1		20	MS/s
A/D resolution				12		bit
Photodiode gain	optimum gain automatically selected			1 10 100		V/mA
Transimpedance amplifier rise time ¹	input capacitance <20pF, gain = 1 kΩ			50		ns
OUTPUT						
Pulse duration	20MS/s sampling rate 1MS/s sampling rate	0.050 1	0.150 1		12 240	μs μs
Current overshoot	at maximum current ²			4	5	%
Pulse separation	selectable: 50•n μs with n = 1 .. 1000	50	100		50 000	μs
Current range	LIV100-40 LIV100-120 LIV100-200	0.156 0.468 0.781	0.156 0.468 0.781		40 120 200	A
D/A resolution				8		bit
Compliance voltage					4	V
Duty cycle	without active cooling LIV100-40 LIV100-120 LIV100-200 with active cooling				0.012 0.004 0.003 0.8	
SIGNAL PROCESSING						
Depth of storage				512		kB
Number of channels			2	3	6	
Number of cycles for averaging		1	1		250	
PC INTERFACE						
Type				USB		
Data transfer rate				1.5		Mbit/s
POWER SUPPLY						
Voltage			5	6	6.5	V
Current			2.5		5	A
DIMENSIONS						
	DAQ unit		130 x 104 x 106 mm (W x L x H)			mm

¹ According to ANSI/IEEE standard 181-1977: 10% to 90%.

² With optimized strip line connector.