	SPECIFICATION YTTERBIUM PULSED FIBER LASERS YLP-V2 1mJ series	Spec: Revision: Page:	E27380 02 1 of 4
--	--	-----------------------------	------------------------

This document specifies the following laser models:


Average output power, W	Model
10W	YLP-V2-1-100-10-10
20W	YLP-V2-1-100-20-20
30W	YLP-V2-1-100-30-30
50W	YLP-V2-1-100-50-50

1. Optical characteristics

N	Characteristic	Test condition	Symbol	Min	Typ	Max	Unit
1	Mode of operation			Pulsed			
2	Polarization			Random			
3	Maximum pulse energy		E _{max}		1		mJ
4	Central emission wavelength		λ	1060	1064	1070	nm
5	Emission Bandwidth	FWHM	$\Delta\lambda$		5	10	nm
6	Nominal average output power • YLP-V2-1-100-10-10 • YLP-V2-1-100-20-20 • YLP-V2-1-100-30-30 • YLP-V2-1-100-50-50		P _{nom}	9.5 19 28 47	10 20 30 50	11 21 32 53	W
7	Output power adjustment range			10		100	%
8	Long-term average power instability	P _{out} = P _{nom}				5	%
9	Nominal pulse repetition rate • YLP-V2-1-100-10-10 • YLP-V2-1-100-20-20 • YLP-V2-1-100-30-30 • YLP-V2-1-100-50-50		RR _{nom}		10 20 30 50		
10	Pulse repetition rate range	Extended PRR mode		2		500	kHz
11	Pulse duration	FWHM P _{out} = P _{nom} RR= RR _{nom}	$\Delta\tau$	80	100	120	ns
12	Laser switching ON/OFF time	BS1 mode			2	3	μsec
13	Guide laser power (optional)	λ = 660nm		0.3	0.5	1	mW

Issued by:	Issue Date:
I.Krinov	02.12.2019

CONFIDENTIAL: This document and any data disclosed therein is the property of IPG Photonics Corporation and its affiliates, and constitute and contain proprietary information. Neither receipt nor possession of this document confers or transfers any right to duplicate, use, or disclose any information contained herein except as expressly authorized in writing by IPG Photonics Corporation.

	SPECIFICATION YTTERBIUM PULSED FIBER LASERS YLP-V2 1mJ series	Spec: Revision: Page:	E27380 02 2 of 4
--	--	-----------------------------	------------------------

2. General Characteristics

N	Characteristic	Min	Typ	Max	Unit
14	Environment temperature range • 50 % emission time • 100% emission time	0 0		+42 +36	°C
15	Storage temperature	-10		+60	°C
16	Cooling method	3 built-in fans			
17	Warm-up time • to start of operation • to full stabilization			0.2 10	min
18	Humidity (non-condensed environment)	10		95	%
19	Laser module dimensions	215x95x286			mm

3. Electrical Characteristics


N	Characteristic	Test condition	Min	Typ	Max	Unit
20	Supply voltage		23	24	25	VDC
21	Control interface		type E			
22	Current consumption • YLP-V2-1-100-10-10 • YLP-V2-1-100-20-20 • YLP-V2-1-100-30-30 • YLP-V2-1-100-50-50				4 5 7 11	A

4. Optical Output (isolated)

N	Characteristic	Test condition	Min	Typ	Max	Unit
23	Protection cable type		metal shielded / PVC coated			
24	Delivery cable diameter		6		7	mm
25	Beam quality M ²				2.0	
26	Output fiber cable length		2.85	3	3.15	m
27	Output beam diameter	@ 86% power	6		9	mm
28	Output beam ellipticity			10	20	%
29	Output beam offset				1	mm
30	Output beam misalignment				5	mrاد
31	Output beam divergence adjustment		minimum of divergence			

5. Delivery configuration and options

- Bitstream 1 (BS1) mode including high contrast (HC)
- Extended pulse repetition rate (PRR) mode
- RS-232C control and monitoring interface
- Optional Guide laser (red aiming diode)
- Optional Output beam diameter alteration
- Optional USB Remote control, laboratory grade (including PC software)

	<p align="center">SPECIFICATION YTTERBIUM PULSED FIBER LASERS YLP-V2 1mJ series</p>	<p>Spec: Revision: Page:</p>	<p>E27380 02 4 of 4</p>
--	--	--	-----------------------------------

8. Laser module dimensions

