This document specifies the following devices:

Average output power, W	Pulse energy	
	0.5mJ	1mJ
10W	YLP-C-0.5-100-20-10	–
20W	–	YLP-C-1-100-20-20

Part number legend: YLP– C– Pulse energy [mJ]– Pulse Duration [ns]– RR [kHz]– Average Power [W]

1. Optical characteristics

N	Characteristic	Test condition	Symbol	Min	Typ	Max	Unit
1	Mode of operation				Pulsed		
2	Polarization				Random		
3	Maximum pulse energy • YLP-C-0.5-100-20-10 • YLP-C-1-100-20-20		Emax		0.5 1		mJ
4	Nominal average output power • YLP-C-0.5-100-20-10 • YLP-C-1-100-20-20		Pnom	9.5 19	10 20	11 21	W
5	Output power adjustment range			10		100	%
6	Nominal pulse repetition rate		RRnom		20		kHz
7	Pulse duration	FWHM Pout= Pnom RR= RRnom	Δτ	80	100	120	ns
8	Central emission wavelength		λ	1055	1064	1075	nm
9	Emission Bandwidth	FWHM	Δλ		5	10	nm
10	Long-term average power instability	Pout= Pnom				5	%
11	Pulse repetition rate	Extended PRR mode		2		80	kHz
12	Laser switching ON/OFF time	BS1 mode			2	3	µs
13	Guide laser power (optional)	λ= 660nm		0.3	0.5	1	mW

2. General Characteristics

N	Characteristic	Min	Typ	Max	Unit
14	Environment temperature range	0		+40	°C
15	Cooling method		4 built-in fans		
16	Warm-up time to start of operation			10	sec
17	Humidity (non-condensed environment)	10		95	%
18	Laser module dimensions		233x59x292		

3. Electrical Characteristics

N	Characteristic	Test condition	Min	Typ	Max	Unit
19	Supply voltage		23	24	25	VDC
20	Current consumption • YLP-C-0.5-100-20-10 • YLP-C-1-100-20-20				 4 5	A

4. Optical Output

N	Characteristic	Test condition	Min	Typ	Max	Unit
21	Protection cable type		metal shielded / PVC coated			
22	Delivery cable diameter		6		7	mm
23	Beam quality M^2				2.0	
24	Output fiber cable length • YLP-C-0.5-100-20-10 • YLP-C-1-100-20-20			 5 3		m
25	Output beam diameter	@ 86% power	6		9	mm
26	Output beam ellipticity			10	20	%
27	Output beam offset				1	mm
28	Output beam misalignment				2	mrad
29	Output beam divergence adjustment		minimum of divergence			

5. Control Interfaces

- Control interface “type D”, digital signal lines (DB-25 plug connector)
- RS-232C interface, control and monitoring (DB-9 plug connector)

6. Delivery configuration and options

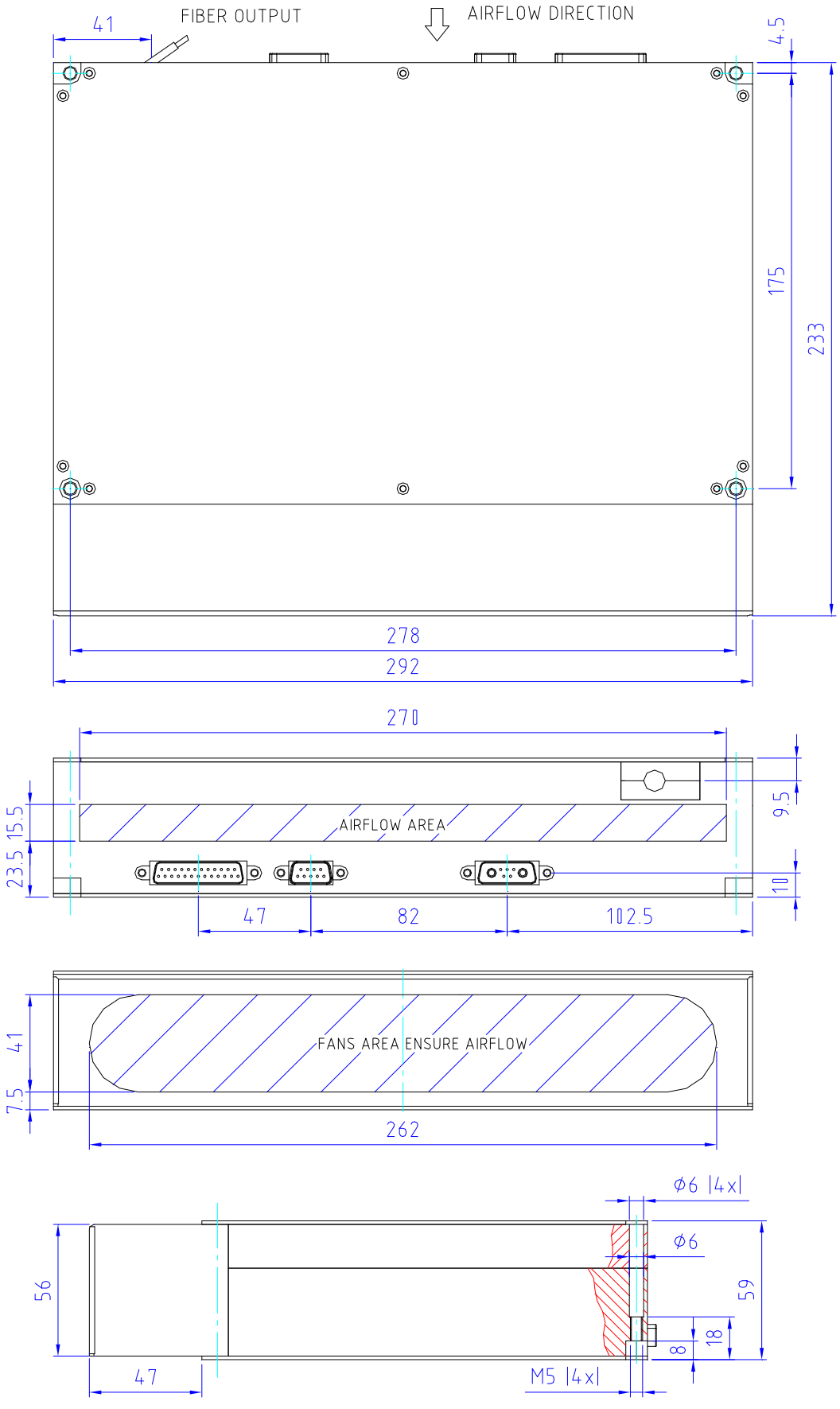
Standard laser configuration includes:

- Bitstream 1 (BS1) mode including high contrast (HC)
- Extended pulse repetition rate (PRR) mode
- RS-232C control and monitoring interface
- Output isolated head

Options:

- Guide laser (red aiming diode)
- Output beam diameter alteration
- Delivery fiber length alteration
- Power supply 100/240 AC autoranging
- USB Remote control, laboratory grade (including PC software)

7. Laser module dimensions



8. Isolated output head dimensions