LightWire FF50 / FF200

Compact Femtosecond Fiber Lasers

FEATURES

▶ *Pulse duration down to 130 fs*
▶ *Up to 200 mW output power*
▶ *Fiber delivery*
▶ *Compact, rugged design*
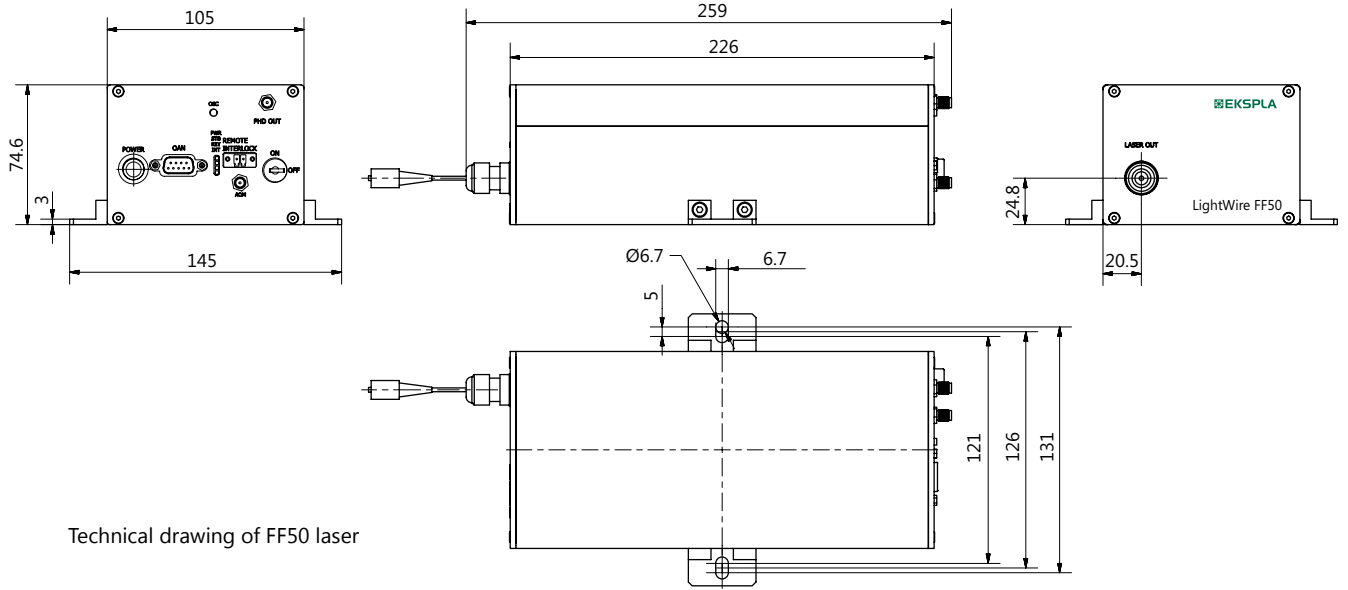▶ *Low maintenance*

APPLICATIONS

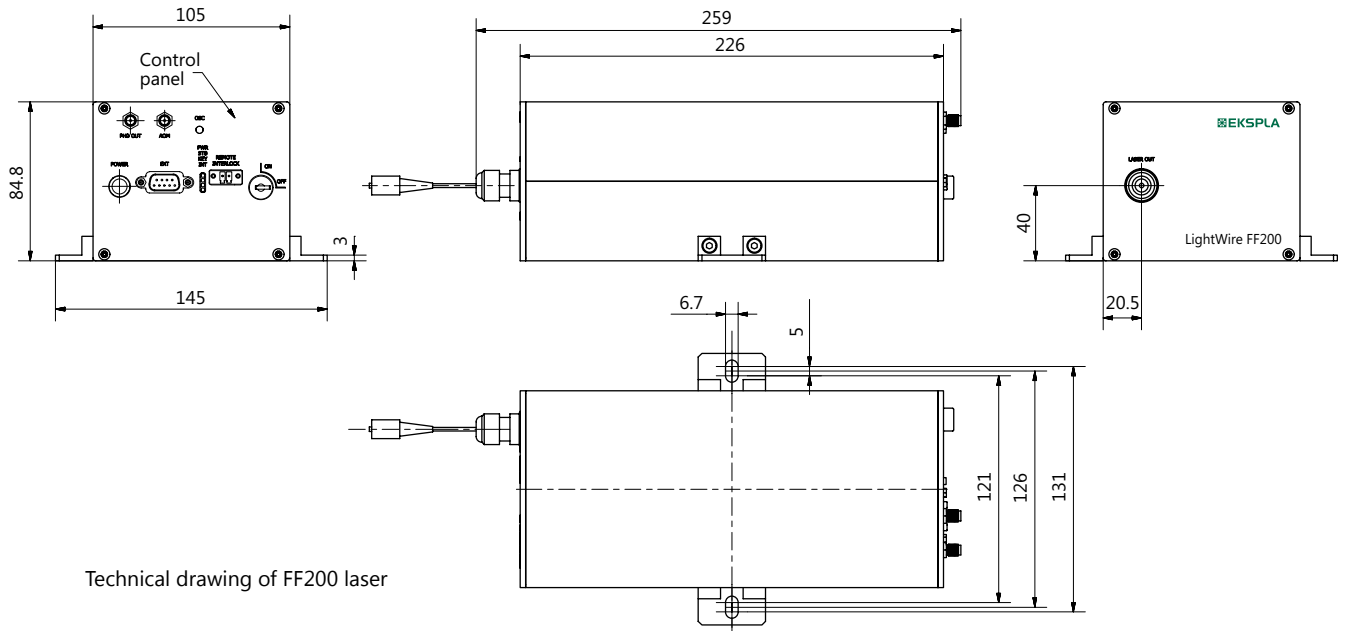▶ *Ultrafast spectroscopy*
▶ *Time-domain terahertz spectroscopy*

OPTIONS

▶ *Pulse picker options [code: FF50/200-AOM]*

LightWire FF50 is a cost effective turn-key femtosecond fiber laser with fiber delivery of the pulses all the way to your sample. Based on a well-established MOPA scheme, LightWire FF50 model laser ensures a reliable hands free operation due to its all-in-fiber construction.

LightWire FF200 is a higher power and shorter pulse version of the sister model from still very compact and cost effective package.

SPECIFICATIONS [1]

Model	LightWire FF50	LightWire FF200
Central wavelength	1064 nm	
Compressed pulse duration	< 160 fs	< 130 fs
Output power	> 40 mW	> 200 mW
Oscillator pulse repetition rate	30 ± 2 MHz	
Pulse repetition rate with pulse picker	30 kHz – 30 MHz	
Pulse energy without pulse picker	> 1 nJ	> 5 nJ
Pulse energy with pulse picker	> 0.5 nJ	> 2.5 nJ
Bandwidth (typical)	15 nm	30 nm
Optical output	0.3 m fiber with collimator	
Beam quality	$M^2 < 1.5$	
Pulse train monitoring	photodiode output	
Dimensions (L×W×H)	228×105×75 mm	228×105×85 mm
Weight	< 2 kg	< 3 kg
Power supply (AC/DC adapter included)	100–240 V, 50–60 Hz AC	
Operating conditions	10–30 °C, humidity – not condensing	

[1] Due to continuous improvement all specifications are subject to change without notice.

DANGER

VISIBLE AND/OR INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO DIRECT
REFLECTED OR SCATTERED RADIATION

Yb:Fiber 1064 nm
Max. 200 mW
CLASS IV LASER PRODUCT
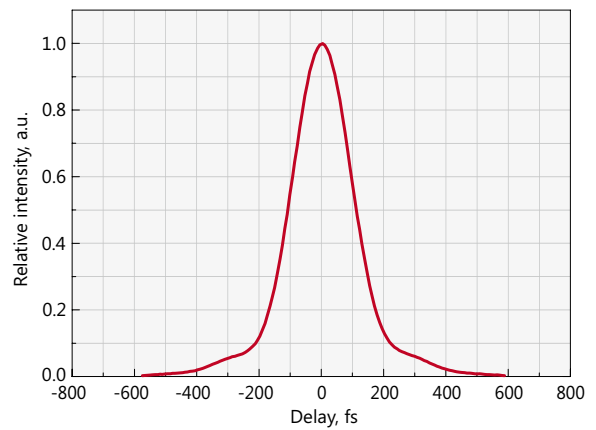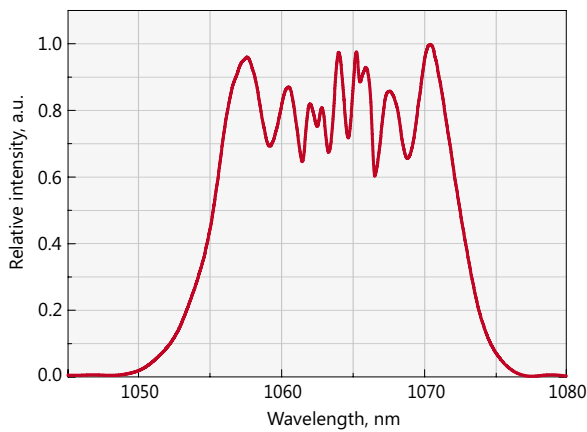
LightWire **FF50/FF200**

Technical drawing of FF50 laser

Technical drawing of FF200 laser

Typical spectrum (left) and autocorrelation (right) of FF50 laser

⊞EKSPLA