## **MEKSMA** OPTICS

## LightWire EO-FP10 • EO-FP100

### **COMPACT PICOSECOND FIBER LASERS**



LightWire EO-FP200 is the highest power version in FP family. Integrated pulse picker and control of nonlinearity allows to achieve transform limited pulses with the energy up to 100 nJ directly from the fiber making this model perfect choice for seeding linear Nd doped solid state amplifiers. Due to high peak power (12 kW) of the emitted picosecond pulses, EO-FP200 alone or with an optional harmonic module can be also used as a source for ultrafast metrology applications like gated Raman spectroscopy and fluorescence life-time measurements.

#### **SPECIFICATIONS** \*

| Model                                   | LightWire EO-FP10                          | LightWire EO-FP100          |  |  |
|---|--|-----------------------------|--|--|
| Central wavelength                      | 1030 nm or 1064 nm<br>tunable ± 0.2 nm     | 1064 nm<br>tunable ± 0.2 nm |  |  |
| Pulse duration                          | < 2 ps                                     | < 7 ps                      |  |  |
| Bandwidth                               | < 1 nm                                     | < 0.4 nm                    |  |  |
| Oscillator pulse repetition rate        | 30 ± 2 MHz                                 |                             |  |  |
| Pulse repetition rate with pulse picker | 30 kHz -                                   | 30 kHz – 30 MHz             |  |  |
| Output power                            | > 2 mW at 1064 nm<br>> 1 mW at 1030 nm     | > 60 mW                     |  |  |
| Pulse energy without pulse picker       | > 70 pJ at 1064 nm<br>> 35 pJ at 1030 nm   | > 2 nJ                      |  |  |
| Pulse energy with pulse picker          | 50% throughput                             |                             |  |  |
| Polarization                            | linear, >100:1 extinction                  |                             |  |  |
| Optical output                          | fiber with FC/APC connector and collimator |                             |  |  |
| Beam quality                            | M <sup>2</sup> < 1.1                       |                             |  |  |
| Pulse train monitoring                  | photodiode output                          |                             |  |  |
| Laser head dimensions (L × W × H)       | 228×104v85 mm                              |                             |  |  |
| Weight (laser head)                     | < 2 kg                                     |                             |  |  |
| Power supply                            | 100-240 V, 50-60 Hz AC                     |                             |  |  |
| Operating conditions                    | 10-30 °C, humidity - not condensing        |                             |  |  |

<sup>\*</sup> Due to continuous improvement all specifications are subject to change without notice.



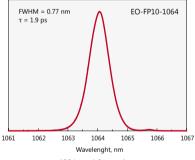
- 2 ps or 8 ps pulse duration
- 1064 nm or 1030 nm output wavelength
- 30 MHz repetition rate
- Up to 60 mW output power
- Spectral bandwidth close to transform limit

#### **APPLICATIONS**

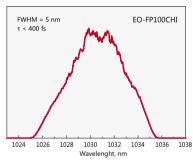
- Seeding of solid state and fiber amplifiers
- Metrology

|      | HM = 0.93 nm<br>1.7 ps |                     | EO-F       | P10-1030 |
|------|------------------------|---------------------|------------|----------|
| 1026 | 1028                   | 1030<br>Wavelenght, | 1032<br>nm | 1034     |

1030 nm 1.7 ps pulses



1064 nm 1.9 ps pulses



Chirped 9 ps pulses at 1030 nm. Compressible to <400 fs

Typical spectra of different EO-FP10 and EO-FP100CHI laser configurations

# **RELATED PRODUCTS** Laser Safety Eyewear See page 1.16. Visualizators See page 1.16

