

## red & black STARZZ

### High flux MIR OPCPA

Sub 50fs MIR pulses at 100kHz

Record CEP stability



The **STARZZ** series of high flux MIR OPCPA is the perfect combination of Ytterbium amplifiers industrial quality and power with FASTLITE ultrafast expertise.

With its design based around FASTLITE landmark technologies for ultimate control and flexibility, the **red & black STARZZ** deliver up to 20W of few-cycle and CEP-stabilized IR pulses at 100kHz with an unprecedented simplicity, thus drastically reducing experiment times for the most demanding applications.

#### Key Features

All collinear geometry

Sub 150mrad single shot CEP stability

Industrial-grade Yb pump

Dry air, purge-compatible enclosure

#### Applications

HHG

XUV spectroscopy & imaging

Attosecond science

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### High flux MIR OPCPA

#### Preliminary specifications

|   | red STARZZ   | black STARZZ  |
|---|--|---|
| Repetition rate   | 100 kHz  |   |
| Central wavelength selection range  | 1,4 - 1,75 $\mu\text{m}$ fixed                     | 2,5 - 4.0 $\mu\text{m}$ fixed                       |
| Output power, single output<br><i>with 100W pump</i><br><i>with 200W pump</i>   | 10 W<br>20 W                                       | 7.5 W<br>15 W                                       |
| Pulse duration  | < 50 fs  |   |
| CEP single shot stability   | < 150 mrad rms                                     |   |
| Pulse to pulse stability  | < 1.5 %rms   |   |
| <b>options</b>  |  |   |
| Tunability  | yes  |   |
| Secondary output<br><i>central wavelength</i><br><i>pulse duration</i><br><i>output power</i><br><i>with 100W pump</i><br><i>with 200W pump</i><br><i>CEP stability</i> | 2,5 - 4,0 $\mu\text{m}$<br>< 100 fs<br>5 W<br>10 W | 1,4 - 1,75 $\mu\text{m}$<br>< 100 fs<br>5 W<br>10 W |
|   | no   |   |

#### Included exclusive technologies



100kHz Dazzler



Octopuzz  
Sync unit



Big Brozzer  
multi-channel data acquisition system



Fringeazz  
integrated CEP detector



Mozza  
1-5 $\mu\text{m}$  spectrometer



Frozzzer  
1-9 $\mu\text{m}$  scanning FROG

#### Available diagnostics