# ultra compact Pulsed Fiber Laser Series Single frequency at 1550nm

## Model no.: ucPFL-1550

#### Description



This ultra compact Pulsed Fiber Laser developed for field applications, generates single frequency short nanosecond pulses at 1550 nm. It is based on a very compact MOPA (Master Oscillator Power Amplifier) architecture that uses proven subsystems and proprietary laser pulse generation. The laser incorporates real-time stabilization and control electronics to optimize laser operation.

#### Optical parameters (at 25°C)

Parameter	Specification	Unit
Center wavelength	In range 1545 – 1560	nm
Center wavelength stability	< 0.05	nm
Spectral width (FWHM)	< 0.5	nm
Pulse width (FWHM) - fixed	< 5	ns
Pulse repetition frequency	single-shot to 500	kHz
Peak power <sup>1</sup>	> 4	kW
Pulse energy <sup>1</sup>	> 15	μJ
Rated average power	> 1	W
Average signal to ASE ratio	> 20	dB
Output polarization	Random	-
Trigger rising edge to pulse jitter	< 1	ns
<sup>1</sup> this sear is not the super star of OOk In		

trigger input frequency of 20kHz

## **Optical connections**

Output fiber	SMF-28 or equivalent
Fiber delivery length	30cm
Fiber termination	FC/APC with attached output beam collimator

#### **Electrical parameters**

Parameter	Specification	Unit
Power supply	+5 and +9	V

### **Mechanical specifications**

Parameter	Specification	Unit
Dimensions	95 x 20	mm

### Typical output optical pulse, 3.5ns



MWTechnologies, Lda. R. Eng. Frederico Ulrich, 2650 4470-605 Moreira da Maia Portugal

Phone: +351 220 168 902 E-mail: sales@mw-technologies.com www.mw-technologies.com

PNEUM Co., Ltd. 5–15–3 Minamikoshigaya,Koshigaya–shi, Saitama–ken,343–0845,Japan TEL: 81-48-985-2720 FAX: 81-48-985-2721 info@pneum.co.jp 1708