

# CONNET LASER TECHNOLOGY



# **VENUS SERIES**

VFLS-1550-M-PL

#### • Features:

High peak output: 100W

· Pulse length: typ: 10ns

· Rep.rate tunable: 1kHz-1MHz

Internal or external TTL modulation

Reliable property

## Applications:

- · DTS
- · OTDR
- · Ranging
- Processing
- · Research & development

### 1550nm Pulsed Laser Source for DTS

The 1550nm Pulsed laser source for DTS of Connet Laser is a pulse fiber laser source with high efficiency based on the 1550nm wavelength which is safe to human eyes. The new ns class pulse drive circuit has stable pulse and tiny distortion. The optimized low noise Er-doped fiber amplifiers realize high peak power and ns class pulse output laser. These lasers are very suitable for the areas of DTS distributed fiber temperature measurement system, laser ranging and optical fiber sensing.

The 1550nm Pulsed laser sources for DTS of Connet Laser employ separate structure with relatively independent optical and circuit. They have modularized package with wide voltage supply, industry standard DB15 communication port design. The user can control and operate the sources easily by computer. The pulse signal generator is integrated inside the source and the signal synchronization output interface is equipped at the same time. The pulse output can be also achieved by external TTL trigger signal. All modules go through strict environmental tests to guarantee the reliability and stability in a long time. It is very suitable for system integration.

### **Specifications:**

Parameter	Unit	Specification		
		Min	Тур	Max
Part No.		VFLS-1550-M-PL		
Wavelength Range	nm	1527	1550	1570
Spectral width(FWHM)	nm	-	0.3	1
Peak power <sup>1</sup>	W	20	30	100
Pulse width <sup>2</sup>	ns	1	10	250
Frequency <sup>3</sup>	kHz	1	10	1000
Beam Quality	$M^2$		1.1	1.2
Side Mode suppression Ratio(SMSR)	dB	35	-	-
Output power stability(15min)	dB	-	±0.003	±0.005
Output power stability(8h)	dB	-	±0.03	±0.05
Output light isolation	dB	35	-	-
Return loss	dB	40	-	-
Operating temperature	°C	-25	-	50
Storage temperature	$^{\circ}$ C	-40	-	85
Output fiber type		SMF-28		
Length of the output fiber	m	> 1		
Optical connectors		FC/APC		
Pulse-triggered mode		Internal or External TTL trigger		
Signal interface		SMA		
Control interface		RS232		
Power supply	VDC	5~24		
Dimensions	mm	150(L)×125(W)×25(H)		

#### **Specifications:**

- Higher output power can be customized;
- Pulse width is optional or tunable from 1 to 250ns;
- Frequency is optional or tunable from 1 kHz to 1MHz.

## **Ordering information:**

- VFLS-1550-M-PL-<PW>
- M: Module
- PW: Peak power in W. Example 30-30W, 50-50W



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