

## THALYS-2090

# 1W CW & Pulsed Fiber Amplifier

### **Key Features**

- Bandwidth from 2030-2110nm
- Ave. Pout 1W
- Peak power > 100W
- Pulsed energy > 5μJ
- Single mode, M<sup>2</sup> ≃ 1
- Rep. Rate 50kHz 2MHz
- Pulse width 50-500ns
- Standard or all-PM version
- Operation Temp: 0 to 50°C

**Applications** 

- Supercontinuum
- Interferometry & spectroscopy
- Nonlinear studies
- · Laser pumping

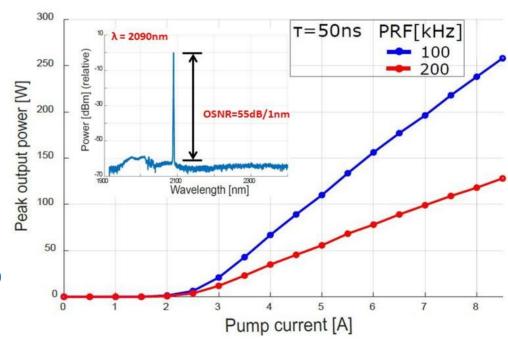
Cybel 2µm Laser & Amplifier Products

- ◆ PHOENIX-2040
- MISTRAL-AMP 5W- 2051
- SCIROCCO-AMP 5W-1950
- MAESTRO-AMP 20W-2000
- MAGNI-NL 10W-1950
- VULCAN 10W-1950
- ◆ ASTROLIGHT 5W-1950

The CYBEL THALYS-2090 is an OEM fiber amplifier with operating bandwidth from a 2030 to 2110nm. This amplifier delivers a 1W of average power or 200W peak power, and 10µJ of energy for 50ns pulses and 100kHz frequency rep. rate. It is capable of amplifying signals with pulse length between 50ns to 500ns and pulse repetition rate between 50kHz to 2MHz.

The **THALYS-2090** amplifier comes in an OEM module (200x150x43mm³) with either a standard or an all polarization maintaining (PM) fiber. Output power and monitoring of key operating parameters with an automatic current control (ACC) mode are controlled from either a RS 232 or USB port.

The **THALYS-2090** amplifiers are efficient and compact all-fiber OEM for supercontinuum & optical parametric generation.





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# **THALYS-2090 Fiber Amplifier**

OPTICAL	Unit	Min	Max	Comments
Wavelength tuning range	nm	2090		2030 to 2110nm
Input average power	dB	-30	10	( LOS down to -17dB available )
Average output power	W	1	1.2	With output isolator
Output peak power	W	10	200	
Pulse repetition frequency	kHz	50	2000	
Pulse width	ns	50	500	
Signal noise ratio	dB	≥17		
Output beam quality M <sup>2</sup>	$M^2$	1.1		
Pout tunability	%	10-100		
Output power variation	%	≤3		RMS
Input fiber length	cm	70		3mm PVC, PM1950, FC/APC connector
Output fiber length	cm	70		3mm PVC, PM1950, FC/APC connector
ELECTRICAL				
Voltage	V	18 to 30		
Warm up time	min	20		
Power consumption	W	70		@Pout ave=1W
Control interface		USB and RS 232		
Mode of operation		ACC		
GENERAL				
Dimensions	mm	200x150x43		w/o heat sink
Storage temperature	°C	-20 to 70		
Operating case temp.	°C	0 to 50		
Humidity	%	5 to 95		Non condensing

#### **CUSTOMIZATION**

The **THALYS-2090** is a amplifier platform that can be customized to match Customers 'specific requirements. Please contact Cybel.

**COMPLIANCE with Regulatory Requirements:** These OEM products are Class 4 lasers as designated by the Center for Device and Radiology Health (CDRH). As such they are intended only in integration into other equipment and do not comply with CDRH requirement. It is the customer responsibility for CDRH certification of the full system that incorporates this industrial laser.





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