

## ITF 1550nm Lidar Sources - Kala 2

### KEY FEATURES

Very Compact Design

High Peak Power

Eye Safe (1550nm)

Wide Temperature Range

Low Power Consumption

Excellent Beam Quality

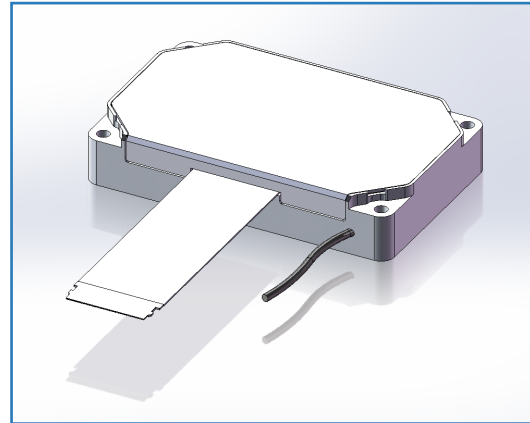
High Reliability for Harsh Environments

### APPLICATIONS

Self-Driving Vehicles

3D Mapping

Distance Measurement



### Laser specifications

	UNITS	MIN	TYP.	MAX	NOTES
Laser peak wavelength (PVWL)	nm	1550 +/- 5			
Pulse width (FWHM)	ns	2.0		8.0	
Pulse repetition frequency (PRF)	kHz	25		5000	
Number of pluse in burst	-	1		3	
Pulse energy at minimum PRF	uJ			12.5	Total, derived spec
Average output power	W			1.0	
Optical Signal-to-Noise Ratio (OSNR)	dB	20	25		
Burst-to-burst energy variation	%			2.5	at 25°C, constant PRF
Peak power	kW			2.5	Total
Pulse (burst) output delay	ns		55	70	
Polarization	-	Random			
Beam quality (M <sup>2</sup> )	-			1.10	By design, SM fiber
Electrical power consumption	W			12	Steady state, at 25°C
Number of output ports	-	1			
Eye safety guard band	%	10			

### Mechanical and environmental specifications

	UNITS	VALUE	NOTES
Dimensions	mm	80 x 50 x 15	
Nominal operating temperature	°C	+25	non condensing
Operating temperature range	°C	-40 to +105	non condensing
Storage temperature range	°C	-40 to +125	non condensing
Warm up time	s	< 1	at 25°C

### ORDERING INFO

ITF Technologies inc.  
400 Montpellier Blvd., Montreal, QC H4N 2G7

Tel: +1 514 748 4848  
Fax: +1 514 744 2080  
Toll Free: +1 888 922 1044

www.itftechnologies.com  
info@itftechnologies.com

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## ITF 1550nm Lidar Sources - Kala 1

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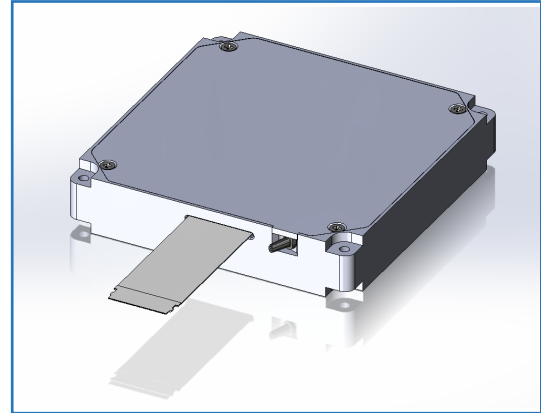
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Pulse width (FWHM)	ns	2.0		8.0	
Pulse repetition frequency (PRF)	kHz	25		5000	
Number of pluse in burst	-	1		3	
Pulse energy at minimum PRF	uJ			25	Total, derived spec
Average output power	W			1.5	
Optical Signal-to-Noise Ratio (OSNR)	dB	20	25		
Burst-to-burst energy variation	%			2.0	at 25°C, constant PRF
Peak power	kW			5.0	Total
Pulse (burst) output delay	ns		55	70	
Polarization	-	Random			
Beam quality (M <sup>2</sup> )	-			1.10	By design, SM fiber
Electrical power consumption	W			8	Steady state, at 25°C
Number of output ports	-		1		

### Mechanical and environmental specifications

	UNITS	VALUE	NOTES
Dimensions	mm	100 x 100 x 20	
Nominal operating temperature	°C	+25	non condensing
Operating temperature range	°C	-40 to +105	non condensing
Storage temperature range	°C	-40 to +125	non condensing
Warm up time	s	< 1	at 25°C

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