

Electrical Specifications



DRIVER OUTPUT CURRENT	MIN	TYP	MAX	UNITS	NOTES
Output Current			2500	mA	
Noise Current Density	100	200	500	pA/√Hz	
RMS Noise Current	250	350	500	nA	10 Hz to 1 MHz
RMS Noise Current	50	100	200	nA	10 Hz to 100 KHz
Current Stability short term (1h)	4	5	6	ppmFS	25°C ambient, warmup: 120min.
Current Stability, long term (12h)	5	6	7	ppmFS	25°C ambient, warmup: 120min.
Temperature Coefficient	-2	-3	-5	ppm/°C	
Compliance Voltage Range			7	V	Typical value @12Vcc supply

EXTERNAL MODULATION	VALUE	UNITS	NOTES
Modulation Bandwidth (-3dB)	2	MHz	Sine Wave
External Modulation Input Range	-5 to +5	V	
Modulation1 gain	200	µA/V	
Max. Modulation1 amplitude	2	mApp	
Modulation2 gain	2	mA/V	
Max. Modulation2 amplitude	20	mApp	
Input Impedance	5k	Ohm	
Ext. Modulation Input Damage Threshold	-10 to +10	V	SMA connector

MONITORS AND OUTPUTS	MIN	TYP	MAX	UNIT	NOTES
Setpoint Resolution		16		bits	
Display Accuracy Measurement Resolution		15		bits	
Accuracy: Current Setpoint vs. Actual Current	0.05	0.1	0.2	%	
Accuracy: Current Monitor vs. Actual Current	0.2	0.5	1.0	%	

TEMPERATURE CONTROLLER	MIN	TYP	MAX	UNITS	NOTES
TEC Current			±3	A	
TEC Compliance Voltage			10	V	
Temperature Stability (12h)		400	500	µK	Absolute stability of the read temperature
Temperature Coefficient		-90	-100	µK/K	

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PLL MODULE	MIN	TYP	MAX	UNITS	NOTES
FR Freq. Range, from 10 MHz to:		300	500	MHz	
LO Freq. Range, from 2 MHz to:		100	200	MHz	
Input Voltage noise		<4		nV/ $\sqrt{\text{Hz}}$	
Input stage gain		30		dB	
Lock bandwidth		800		KHz	
R.S.S.I. dynamic range		-30, 0		dBm	

POWER SUPPLY REQUIREMENTS	MIN	TYP	MAX	UNITS	NOTES
Main Power supply voltage	11.5	12	15	V	Supply voltage can be tailored on the required voltage compliance of the laser
Main Power supply current	2			A	
TEC Power supply voltage	8	12	24	V	
TEC Power supply current	--	4	--	A	Minimum current can be lower than 4A if the TEC module is limited to a maximum current lower than 3A.
Power Consumptions		9	40	W	

GENERAL SPECIFICATIONS	VALUE	UNITS	NOTES
Warm-up Time	120	minutes	
Remote Interface	USB		USB Virtual serial port - 115 kbaud rate
Warranty	1	year	
Safety Tested to	EN 61326-1; EN 55011 EN 61000-4-2; EN 61000-4-8 EN 61000-4-3		European Council Directive 2004/108/EC & European Council Directive 2006/95/EC

ABSOLUTE MAXIMUM RATINGS	MIN	TYP	MAX	UNIT	NOTES
Operating Temperature	-20		40	°C	
Storage Temperature	-20		70	°C	
Weight	1.0	1.3	2.0	Kg	Depending on the configuration
Footprint	100 x 120			mm	Length, Width
Height	105		177	mm	Depending on the configuration

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