

LPS-20

<https://www.gigahertz-optik.com/es-es/producto/lps-20/>

Etiquetas del producto:



Descripción

LPS-20 Single Channel LED Power Supply

The LPS-20 is a microprocessor-based current and voltage source especially designed for the operation of LEDs, OLEDs and other light sources requiring high resolution, very low noise operating voltage and current that is controllable and measureable. It is set-up for full remote control operation in CW or Flash mode via its RS232 or alternative RS485 opto-coupler isolated interface. DLL and Labview VI are available. Its design includes two high resolution 16 bit digital to analog converters for precise current and voltage control. It can be operated either in constant voltage or constant current mode. The variable (current or voltage) can be measured with a high resolution ADC. Beside the continuous mode the output of the LPS-20 can be controlled for a defined time (single pulse) with rise time as short as 500µs (load dependent). A standard version with defined maximum output current level is supplied.



LPS-20-xx Versions

LPS-20

LPS-20-1500: max. 1500 mA (30 µA resolution). max. 24V (0.5 V resolution)

LPS-20-1000: max. 1000 mA (20 µA resolution). max. 24V (0.5 V resolution)

LPS-20-100: max. 100 mA (2 µA resolution). max. 24V (0.5 V resolution)

LPS-20-10: max. 10 mA (0.2 µA resolution). max. 24V (0.5 V resolution)

Especificaciones

General	
Breve descripción	High precision controller for constant-current or constant-voltage remote operation of LEDs. Linear controller for low noise Operation.
Características principales	16 bit DAC for the current or voltage control. 16 bit ADC for the current or voltage measurement. Change between voltage and/or current mode without spikes for very fast current or voltage limiting. Sense Input to measure the forward voltage direct at the test LED (Four contact measurement) CW or pulse mode. RS232 or RS485 remote Interface. Software development kit. Housing for 19 Inch rack use.
Rango de medición	LPS-20-1500: max. 1500 mA (30 µA resolution). max. 24V (0.5 V resolution)
	LPS-20-1000: max. 1000 mA (20 µA resolution). max. 24V (0.5 V resolution)
	LPS-20-100: max. 100 mA (2 µA resolution). max. 24V (0.5 V resolution)
	LPS-20-10: max. 10 mA (0.2 µA resolution). max. 24V (0.5 V resolution)

aplicaciones típicas	LED current or voltage driver in LED Testsystems in CW or pulse measurement mode. See System examples TFCT25, TPI21-TH
Calibración	Current Calibration
Producto	
Fuente de alimentación	(7 - 28) VDC
Conector de entrada de CC	Phoenix MC15/2GF
Corriente de salida	Max. 1,5 A, other current ranges on request
Tensión de salida	max. 24V or (DC input voltage - 4V)
Potencia interna máx.	7W (input voltage - output voltage) · output current
Conector de salida DC	Phoenix MCDN1.5/6
Precisión de la corriente de salida	± 0.1 % ± 60 µA LPS-20-1500 ± 40 µA LPS-20-1000 ± 4,0 µA LPS-20-100 ± 0,4 µA LPS-20-10
Precisión de la tensión de salida	± 0.1 % ± 1 mV
Resolución de la corriente de salida	30 µA LPS-20-1500 20 µA LPS-20-1000 2 µA LPS-20-100 0,2 µA LPS-20-10
Resolución de la tensión de salida	0.5 mV
Tiempo de subida	output current or voltage (10-90) % (also valid for pulse operation) at load resistance: 10R: 500 µs, 100R: 2 ms, 1000R: 20 ms
rango de temperatura	current: ± 30 µA LPS-20-1500 ± 20 µA LPS-20-1000 ± 2 µA LPS-20-100 ± 200 nA LPS-20-10 voltage: ± 0.5 mV/°K

Estabilidad	± 150 µA LPS-20-1500
	±100 µA LPS-20-1000
	±10 µA LPS-20-100
	±1µA LPS-20-10
	±0.5 mV
	for 8 hours (60 minutes after switch on of output current by constant environment)
Precisión de la medición de la corriente	± 0.1 %
	± 60 µA LPS-20-1500
	± 40 µA LPS-20-1000
	± 4 µA LPS-20.100
	± 0,4 µA LPS-20-10
Precisión de la medición de la tensión	± 0.1 % ± 1mV
Resolución de la medición de la corriente	15 µA LPS-20-1500
	10 µA LPS-20-1000
	1 µA LPS-20-100
	100 nA LPS-20-10
Resolución de la medición de la tensión	0.1 mV
Tiempo de conversión del ADC	100 ms (Option 1: 20 ms) for voltage or current measurement
Valores de los pulsos	pulse on time: (1 - 999) ms pulse off time: (1 - 999) ms number of pulses: 1 - 999
Precisión del tiempo de encendido/apagado de los pulsos	2 % ± 0.5 ms
Pantalla	LEDs: green: blinking: DC input voltage present continuous: output switched on red: continuous: error
Entrada de control	internal pull-up resistor 10 kOhm to +5 V option 1: Input 2 replaced by signal SCL
Control de salida	MOSFET switch to GND, 0.3 R, max. 32 V, max. 1 A option 1: Output 2 replaced by signal SDA
Miscelánea	
Interfaz	RS232 / RS485: 19200 Bd, 8D, 1S, N optocoupler isolated
rango de temperatura	operation: 10 °C - 30 °C (with free air flow) storage: 5 °C - 50 °C
Dimensiones	105 mm x 126 mm x 45 mm (3HE, 9TE)

Peso	350 g
Garantía	12 month

Configurable con

Nombre del producto	Imagen del producto	Descripción	Ir al producto
S-SDK-LPS		Software Development Kit for LPS variants (power supply).	https://www.gigahertz-optik.com/es-es/producto/s-sdk-lps/
BTH-19		Bench-top and rack housing for 3HE rack modules. Features: The bench-top housings are available in half, third or full 19" widths. Power supply modules for (110-230) V, 50/60 Hz with low DC voltages for both external devices and those within the housing.	https://www.gigahertz-optik.com/es-es/producto/bth-19/
LS-OS1.5-LED3		Light source for use with the UM series modular construction integrating spheres. Features: External lamp for up to seven LEDs of type Golden Dragon Osram. LEDs connected in line or in 3 groups. Fan for the heat sink.	https://www.gigahertz-optik.com/es-es/producto/ls-os1.5-led3/
LS-OS1.5-LED1		Light source for use with the UM series modular construction integrating spheres. Features: External lamp for up to seven LEDs of type Golden Dragon Osram. LEDs connected in line or in 3 groups. Fan for the heat sink.	https://www.gigahertz-optik.com/es-es/producto/ls-os1.5-led1/
SC-05		Control de sistema para aplicaciones versátiles de medición de luz	https://www.gigahertz-optik.com/es-es/producto/sc-05/

Información de compra

Número de artículo	Modelo	Descripción
Producto		
15297596	LPS-20-1500-RM	Power supply module. Output current controllable up to 1500 mA. Other current ranges on request.
El software		

Número de artículo	Modelo	Descripción
15298224	S-SDK-LPS	Software Development Kit for the implementation of a LPS variant into custom made software

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Gigahertz Optik GmbH (Sede central)

Tel.: +49 (0)8193-93700-0
Fax: +49 (0)8193-93700-50
info@gigahertz-optik.de

An der Kaelberweide 12
82299 Tuerkenfeld, Germany

Gigahertz-Optik, Inc. (Oficina de EE.UU.)

Phone: +1-978-462-1818
info-us@gigahertz-optik.com

Boston North Technology Park
Bldg B - Ste 205
Amesbury, MA 01913 USA