

#### LBB-HSI-Series Product Manual

### Overview:

- > Designed for industrial field automatic measurement of LED
- > Output data :HSLI,RGBI, Lux,
- > brightness range is up to 1 million Lux,resolution is up to 0.2lux
- >4/8/12/16 /20 channel
- >16bit high resolution, high accuracy and good repeatability
- > Communication interface rich (USB / RS485 )
- > Multi-channel simultaneous capture LED flashing frequency (<15Hz)
- > Automatic identification of digitron, instead of CCD, reduce system cost
- > Provide secondary development SDK, can be embedded ICT, FCT, ATE machine
- > Compatible with 1.0 or 1.3 mm fiber, Default 1.3 mm
- > Wide voltage work, industrial design, high stability

## Application:

- > LED color and brightness measurement on various PCBA
- >Leds for consumer electronics
- >LED color parameter requirements are not high occasions
- > Self checking of the LED on the server /PC/NB motherboard
- > Embedded ICT / FCT / ATE machine, combined with the PC to achieve LED automatic measurement
- > Automatically read the data displayed by digitron, instead of CCD

### Application examples:









# List of electrical optics specifications:

Туре	Item	Parameter	Remark
electrical	Input voltage	USB power supply or external	T<60℃, H<90%
specification		DC9-26V power supply	
	Working current	USB-300MA,DC24V-100MA	Built-in fuse, one-way diode
	Communication	USB (USB to RS232) and RS485	
	Interface		
	communication	8,1,None,buad(2400-921600)	ID, Buad can be configured, the same as the two
	protocol		interface communication protocols
	data format	HSLI,RGBI,Lux, etc.	







	Module channel	4/8/16/20chl can be chosen	The size of the shell does not change
	Cascade	RS485 interface supports	Maximum support 32 * 20 = 640 channels
	expansion	32modules in parallel	
	DIO interface	Optional DIO interface can be	Configure the upper and lower limits, IO
		connected with PLC	automatically output the results, offline running
	special function	digitron read and LED flashing frequency (f <15Hz)	Replace the CCD to read the digital tube data
Software programming	Programming language	C,C++,C#,VB,labview etc.	Provide Labview sample source code
	SDK	Provide RS232 command table,	MODBUS-ASCII protocol
	support system	WINDOWS,LINUX,Wince etc.	Serial port instructions support any hardware and software platform
	Debugging	Equipped with full-featured	Can be configured upper and lower limits, DI
	software	measurement and analysis software	trigger, DO output, offline running
Optical data characteristics	Lux	linear: 6% @D65 led	Repeated measurement: 1%
	RGBI	HSL(RGB): Repeated measurement: 1%+1	I:(0.01%-100%)
	Wavelength range	400-700nm	Visible light measurement
Optical hardware	Brightness range	Up to 1 million Lux, The resolution is up to 0.2lux	dynamic range: 16bit
characteristi	Filter		
CS	Fiber specification	1.0mm or 1.3mm fiber	Default 1.3mm
Shell size (Patent shell)	boundary dimension	128 * 66 * 30mm	Positioning hole spacing 35mm (4mm through hole)
	Fiber fixation	Optical fiber clip	Fast plug interface
	Material	Black POM+Aluminum alloy	Led BLACK BOX (LBB)
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