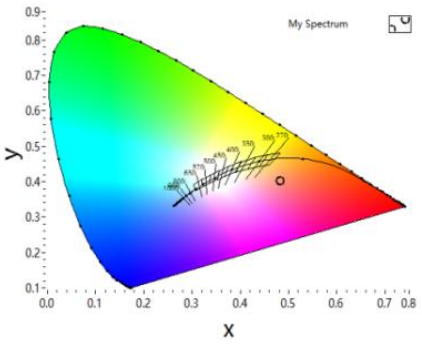
LBB-XYZ-Series Product Fast Manual

Overview:

> Designed for industrial field automatic measurement of LED
> brightness range is up to 1 million Lux,resolution is up to 0.1lux
>4/8/16 /20/24/32/40 channel and H/L/M gain Selectable
>16bit high resolution, high accuracy and good repeatability
> Communication interface rich (USB / RS485 / LAN)
> Color coordinates according to the standard CIE1931, CIE1976
> Output data is rich in format (RGB, HSL,Lux, XYZ, xy, uv, CCT, HSL,freq, DomiWave)
> Multi-channel simultaneous capture LED flashing frequency (<50Hz)
> Automatic identification of digitron, instead of CCD, reduce system cost
> Reserved DIO, can be triggered by DI (optoc) test, DO (NPN) output test results
> Provide secondary development SDK, can be embedded ICT, FCT, ATE machine
> Compatible with 1 / 1.3 / 2.2 / 3mm four kinds of fiber, easy plug
> Wide voltage work, industrial design, high stability

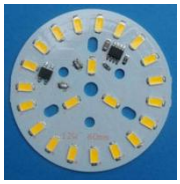


Application:

> LED color and brightness measurement on various PCBA
> LED color and brightness and color temperature require a higher measurement
> ambient light color temperature calibration measurement
> Car Flow LED test
> Measure the color and brightness of the LCD backlight and LCD front panel
> Self checking of the LED on the server /PC/NB motherboard
> Car front and rear lights, car dashboard LED, car atmosphere lights
> Embedded ICT / FCT / ATE machine, combined with the PC to achieve LED automatic measurement
> LED scintillation frequency measurement
> Automatically read the data displayed by digitron, instead of CCD

Application examples:

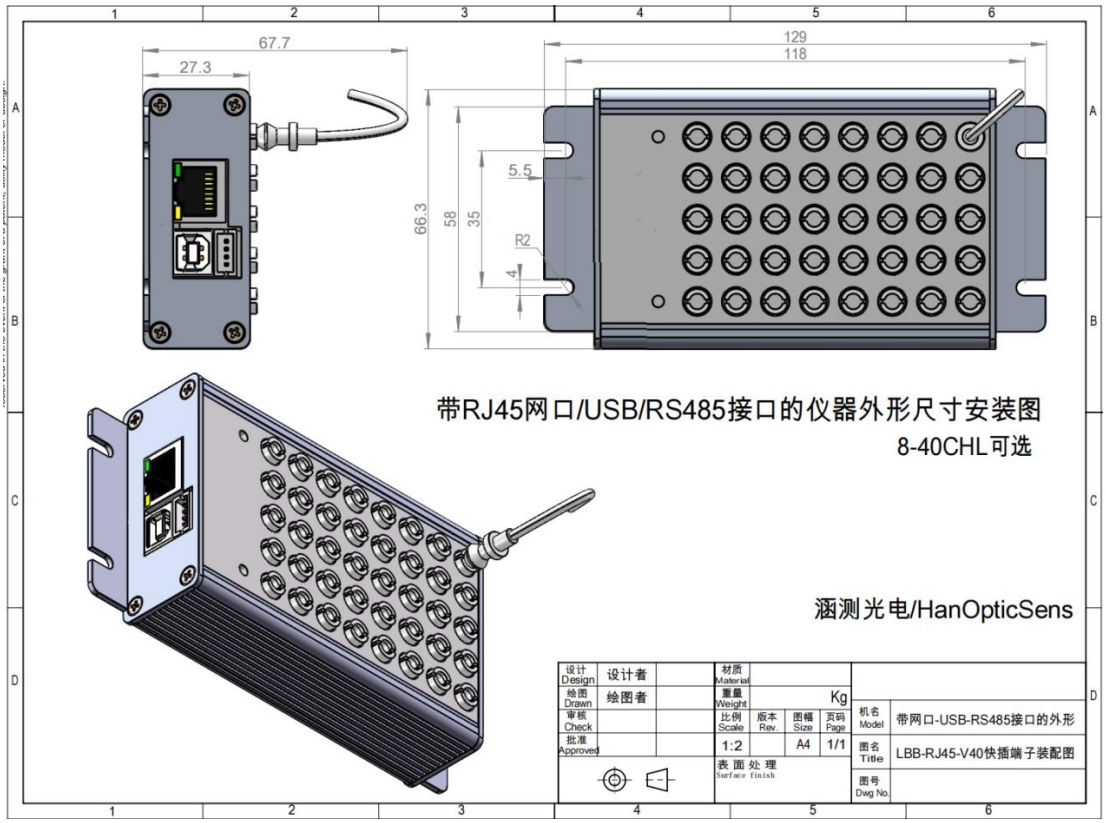


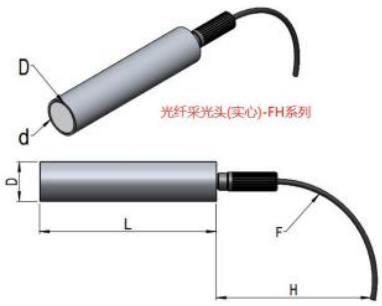
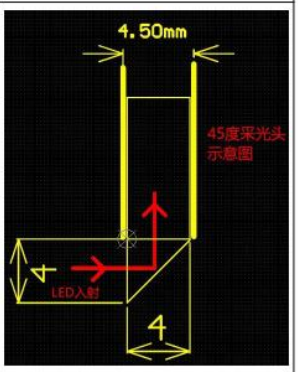

List of electrical optics specifications:

Type	Item	Parameter	Remark
electrical specification	Input voltage	USB power supply or external DC9-26V power supply	T<60℃, H<90%
	Working current	USB-300MA,DC24V-100MA	Built-in fuse, one-way diode
	Communication Interface	USB (USB to RS232) and RS485	LAN(tcp/ip)
	communication protocol	8,1,None,buad(2400-921600)	ID, Buad can be configured, the same as the two interface communication protocols
	data format	RGB,HSL,Lux,CCT,xy,u'v',dowave,Flick etc.	CIE1931,CIE1976
	Module channel	4~40chl can be chosen	The size of the shell does not change
	Cascade expansion	RS485 interface supports 32 modules in parallel	
	DIO interface	Optional DIO interface can be connected with PLC	Configure the upper and lower limits, IO automatically output the results, offline running
	special function	digitron read and LED flashing frequency (f <50Hz)	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 software	Equipped with full-featured measurement and analysis software	Can be configured upper and lower limits, DI trigger, DO output, offline running
Optical data characteristics	Lux	linear：6% @D55 led	Repeated measurement：0.5%@10k lux
	xy(CIE1931)	Accuracy：0.015 @D55 led	Repeated measurement：0.001 @10k lux
	uv(CIE1976)	Accuracy：0.015 @D55 led	Repeated measurement：0.001 @10k lux
	CCT	Accuracy：7% @D55 led	Repeated measurement：25K
	DomiWave	Accuracy：+-4nm @468nm Led Accuracy：+-5nm @525nm Led Accuracy：+-6nm @634nm Led	Repeated measurement：0.5nm Digital resolution ：0.1nm
	RGB(HSL)	no international reference standard	Repeated measurement：1%+1
	In the field of optical fiber measurement, there are many factors affecting the Accuracy		
	Wavelength range	400-720nm	Visible light measurement

Optical hardware characteristics	Brightness range	Up to 1 million Lux, The resolution is up to 0.1lux	
	Filter	XYZ series optical filters	
	Fiber specification	Compatible with an outer diameter of 2.2mm / 1.3mm / 1.0mm fiber	1.3 / 1.0mm fiber with tail plug，
	Special parameters	LM	Need a fiber optic lumen probe， And it requires a secondary calibration
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)
	Expansion interface	DIO	The extended DIO module can interact with PLC



HanOpticSens 采光头-选型合集-V22.06

型号	外径 D	内径 d	长度 L	光纤外径 F	光纤折弯最小高度 H	光纤是否支持插拔	功能	备注 (单位 mm)
光纤采光头 **(实心)**	钢管外径 D 误差+-0.03mm，钢管长度 L 误差+-1mm； 如果要紧配，建议打孔直径(D+0.05mm)， 如果侧面用支付螺丝，建议打孔直径(D+0.1mm)； 不支持插拔光纤长度默认 1 米，其他长度需提前沟通；						适合测量产品外壳弱光灯，尤其是带字符图档灯，或 PCBA 上的多芯灯珠，内置光纤耦合透镜，增大采光面积，改善采光效果	外径 D 相同产品，光纤直径越粗，耦合效率越高，越适合测量弱光； 在空间允许的情况且灯光较强亮度下，尽可能选用粗一些的采光头，改善效果更佳
FH2525-2.2	2.5	2.2	25	2.2	30	**否**		
FH3025-1.3	3.0	2.5	25	1.3	40	**否**		
FH3025-2.2	3.0	2.5	25	2.2	50	**否**		
FH3525-1.0	3.5	3.0	25	1.0	30	是		
FH3525-1.3	3.5	3.0	25	1.3	40	是		
FH3525-2.2	3.5	3.0	25	2.2	50	否		
FH4525-1.0	4.5	4.0	25	1.0	30	是		
FH4525-1.3	4.5	4.0	25	1.3	40	是		
FH4525-2.2	4.5	4.0	25	2.2	50	否		
FH4536-1.0	4.5	4.0	36	1.0	30	是		
FH4536-1.3	4.5	4.0	36	1.3	40	是		
FH4536-2.2	4.5	4.0	36	2.2	50	否	**支持 45 度斜边采光头**	
FH5536-1.0	5.5	5.0	36	1.0	30	是		
FH5536-1.3	5.5	5.0	36	1.3	40	是		
FH5536-2.2	5.5	5.0	36	2.2	50	否		
FH6536-1.0	6.5	6.0	36	1.0	30	是		
FH6536-1.3	6.5	6.0	36	1.3	40	是		
FH6536-2.2	6.5	6.0	36	2.2	50	否		
FH7536-1.0	7.5	7.0	36	1.0	30	是		
FH7536-1.3	7.5	7.0	36	1.3	40	是		
FH7536-2.2	7.5	7.0	36	2.2	50	否		
FH8036-1.0	8.0	7.0	36	1.0	30	是		
FH8036-1.3	8.0	7.0	36	1.3	40	是		
FH8036-2.2	8.0	7.0	36	2.2	50	否		
FH8542-1.0 (FH9042-1.0)	**8.5** (9.0)	8.0	42	1.0	30	是	9.0mm 外径钢管，只是钢管壁厚增加，架构加强了，其他光学参数不变	
FH8542-1.3 (FH9042-1.0)	**8.5** (9.0)	8.0	42	1.3	30	是		
FH8542-2.2 (FH9042-2.2)	**8.5** (9.0)	8.0	42	2.2	50	否		

型号	外径 D	内径 d	长度 L	光纤外径 F	光纤折弯最小高度 H	光纤是否支持插拔	功能	备注 (单位: mm)
光纤流明采光头(空心)	钢管外径 D 误差+-0.03mm，钢管长度 L 误差+-1mm； 如果要侧面支付螺丝固定，打孔直径(D+0.1mm)， 由于空心探头钢管壁厚只有 0.2mm，尽量朝上半部分固定， 最好采用两块半圆加紧，可防止破坏探头外观； 不支持插拔光纤长度默认 1 米，其他长度需提前沟通；						适合测量 PCBA 上高亮 LED，高温灯珠，尤其是 RGB 多芯灯，汽车照明 LED,适合测量 LED 的流明值，可弥补定位精度不足产生的波动，提高稳定性；	因为是空心开口采光头，因此安装时，尽量口朝下安装，避免灰层进入内腔，如果开口必须朝上，则可以做个透明亚克力塞子塞住洞口，防止灰层进入
LM5536-1.0	5.5	4.0	36	1.0	30	是		
LM5536-1.3	5.5	4.0	36	1.3	40	是		
LM5536-2.2	5.5	4.0	36	2.2	50	否		
LM6536-1.0	6.5	5.0	36	1.0	30	是		
LM6536-1.3	6.5	5.0	36	1.3	40	是		
LM6536-2.2	6.5	5.0	36	2.2	50	否		
LM7536-1.0	7.5	6.0	36	1.0	30	是		
LM7536-1.3	7.5	6.0	36	1.3	40	是		
LM7536-2.2	7.5	6.0	36	2.2	50	否		
LM8036-1.0	8.0	6.0	36	1.0	30	是		
LM8036-1.3	8.0	6.0	36	1.3	40	是		
LM8036-2.2	8.0	6.0	36	2.2	50	否		
LM8542-1.0 (LM9042-1.0)	8.5 (9.0)	6.6	42	1.0	30	是		
LM8542-1.3 (LM9042-1.3)	8.5 (9.0)	6.6	42	1.3	40	是		
LM8542-2.2 (LM9042-2.2)	8.5 (9.0)	6.6	42	2.2	50	否		
LM10050-1.0	10.0	8.0	50	1.0	30	是		
LM10050-1.3	10.0	8.0	50	1.3	40	是		
LM10050-1.3	10.0	8.0	50	2.2	50	否		
LM4536-1.0	4.5	3.0	36	1.0	30	是	开口只有 3mm,只适合测量小封装 LED 的流明值，若非空间放不下，不建议用该款采光头	
LM4536-1.3	4.5	3.0	36	1.3	40	是		
LM4536-2.2	4.5	3.0	36	2.2	50	否		