

Equipment Data Sheet for Two-Way FSO Communication Module PCB					
Tag No. :	FSO-01	Client:	UWA School of Engineering		
Service:	Two-Way FSO – Module	Delivery Location:	UWA (Perth, WA)		
P & ID No.:	N/A	Manufacturer:	JLCPCB		
Calculation Ref.:	N/A	Purchase Order No.:	TBC		
No. of Units:	1	Specification:	N/A		
Service Description:	Receive and condition optical signal. Provide digital output and USB interface.				
ENVIRONMENTAL CONDITIONS			POWER SYSTEM		
Location:	Lycopodium Lab	System Voltage:	5 V (DC) ± 5.0%		
Ambient air temp:	25° C	System Frequency:	N/A		
Humidity:	0–95% RH (non-condensing)				
Hazardous Area Classification:	Non-Hazardous				
No.	EQUIPMENT DETAILS	UNITS	PURCHASER'S REQUIREMENTS	VENDOR'S DATA	
1	PCB MAIN DESIGN DATA				
1.1	Rated Voltage	V	5		
1.2	Rated Maximum Voltage	V	5.25		
1.3	Rated Current	mA	≤ 250		
1.4	Rated Frequency / Data Rate	—	N/A (optical OOK); USB-LS 1.5 Mbps		
1.5	PCB Material	N/A	FR-4		
1.6	PCB Dimensions	mm	90.14mm x 83.06mm		
1.7	PCB Layers	QTY	4		
1.8	PCB Thickness	mm	1.6		
1.9	PCB Weight	g	< 50g		
1.10	PCB Colour	N/A	Green		
1.11	Silkscreen	N/A	White		
1.12	Surface Finish	N/A	ENIG (lead-free)		
1.13	TIA (Transimpedance Amp)	QTY	LTC6268		
1.14	Comparator	QTY	LTC6752		
1.15	Local Regulation (5V→3V3)	QTY	TPS7A8101 or equiv.		
1.16	Operating Temperature	°C	-10 °C to +60 °C		
1.17	IP Rating	N/A	N/A (benchtop)		
Rev.	Date	Issue Description	Originated	Checked	Approved
0	15-Oct-2025	Issued for Review	VN	JS, SW	All
A	20-Oct-2025	Issued for Construction	VN	JS, SW	All
Notes:			Client: UWA School of Engineering		
			Datasheet No.: UWA-5550-Group-016		
			Sheet 1 of 1		