ALS LED Light Source
with 85/85 launch condition

- Compact hand held light source
- Insertion Loss testing for Aerospace applications
- Provides stable 85/85% launch conditions for multimode fiber measurements
- 1300 nm or 850 nm LED
- For 62.5/125 µm or 50/125 µm fiber
- Rechargeable Li-Ion battery with 48 hr life

The ALS handheld optical fiber source is used with an Optical Power Meter to measure the loss of multimode optical fiber systems, in applications which require 85/85% Limited Phase Space modal launch conditions. The ALS provides excellent stability and ease of use.

The 85/85% modal launch condition is used specifically in the aerospace industry, and it's widely used by Airbus for certification of its optical fiber harnesses.

Technical Specifications

Part Number	ALS-1300-62-85-HH	ALS-1300-50-85-HH	ALS-0850-62-85-HH	ALS-0850-50-85-HH
Description	1300 nm LED light source with FC connector to deliver 85/85% modal launch into 62.5/125 µm fiber.	1300 nm LED light source with FC connector to deliver 85/85% modal launch into 50/125 µm fiber.	850 nm LED light source with FC connector to deliver 85/85% modal launch into 62.5/125 µm fiber.	850 nm LED light source with FC connector to deliver 85/85% modal launch into 50/125 µm fiber.
Source Type	LED			
Centre Wavelength	1300 nm		850 nm	
Spectral Width	<170 nm (FWHM)		50 nm +/- 10 (FWHM)	
Dimensions	200 mm x 120 mm x 35 mm			
Weight	0.5 kg			
Optical Power Output	-20 dBm into 62.5/125 µm fiber	-20 dBm into 50/125 µm fiber	-20 dBm into 62.5/125 µm fiber	-20 dBm into 50/125 µm fiber
Optical Power Stability *	± 0.05 dB			
Optical Launch Condition	85/85% Limited Phase Space			
Connector Interface	FC			
Power	Built-in Li-Ion battery (External charger supplied)			
Battery Life	48 hours continous			
Case	ABS			
Operating Temperature	5° to 45°C			
Storage Temperature	-10° to +60°C			
Humidity	5% – 95%, relative, non-condensing			

*Stability measured after 10 second initialisation period from device turn-on. Temperature maintained within ± 1°C during test period.

Manufactured by
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Launch condition for ALS Light Sources

The modal launch conditions for our ALS light sources are specified in terms of the width of the Near Field Pattern at 5, 15 and 75% of the maximum. The specification limits are shown below.

A Certificate of Conformance is provided as standard; a Test Certificate (850 and 1300 nm) giving details of how it was measured is available as an option.

Launch condition for 62.5/125 µm fiber

Physical	Maximum value (µm)	Minimum value (µm)
5	55	51
15	52	45
75	33	20

Launch condition for 50/125 µm fiber

Physical	Maximum value (µm)	Minimum value (µm)
5	44.0	40.8
15	41.6	36.0
75	26.4	16.0

Ordering Information

Part Number	Description
ALS-1300-62-85-HH	1300 nm LED light source with FC connector to deliver 85/85% modal launch into 62.5/125 µm fiber. External battery charger, storage case, Certificate of Conformance and User Manual are included.
ALS-1300-50-85-HH	1300 nm LED light source with FC connector to deliver 85/85% modal launch into 50/125 µm fiber. External battery charger, storage case, Certificate of Conformance and User Manual are included
ALS-0850-62-85-HH	850 nm LED light source with FC connector to deliver 85/85% modal launch into 62.5/125 µm fiber. External battery charger, storage case, Certificate of Conformance and User Manual are included
ALS-0850-50-85-HH	850 nm LED light source with FC connector to deliver 85/85% modal launch into 50/125 µm fiber. External battery charger, storage case, Certificate of Conformance and User Manual are included

Part Number	Description
ALS-BC	ALS light source external battery charger (one is included with all ALS light sources)
ALS-CC	ALS light source Certificate of Conformance (one is included with all ALS light sources)
ALS-TC	ALS light source Test Certificate (not included - this is an extra option)
ALS-UM	ALS light source User Manual (one is included with all ALS light sources)

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Ordering Information

Accessories	Description
ALS-RR	ALS light source recertification. Includes product check and adjustment if required, retest and issue of new Certificate of Conformance.
ALS-560XL	560XL InGaAs Optical Power Meter
ALS-T1020	T1020 SOC adapter for NTT/FC-PC (you will need at least one adaptor to use the 560XL Power Meter)
ALS-CT01	Coupler tube for linking two ELIO terminated patchcords in order to null the power meter before IL testing
ALS-TL01-50-FC/FC-S	Test lead for use with 85/85 Light Source/Power Meter. Made in 50/125 µm fiber, 1.5 m long with FC connectors on each end, Cable construction 3 mm diameter PVC sheath, with Aramid yarn strength number.
ALS-TL01-62-FC/FC-S	Test lead for use with 85/85 Light Source/Power Meter. Made in 62.5/125 µm fiber, 1.5 m long with FC connectors on each end, Cable construction 3 mm diameter PVC sheath, with Aramid yarn strength number.
ALS-TL01-50-FC/Elio-S	Test lead for use with 85/85 Light Source/Power Meter. Made in 50/125 µm fiber, 1.5 m long with FC connector on one end, Elio connector on the other. Cable construction 2 mm diameter PVC sheath, with Aramid yarn strength member.
ALS-TL01-62-FC/Elio-S	Test lead for use with 85/85 Light Source/Power Meter. Made in 62.5/125 µm fiber, 1.5 m long with FC connector on each end, Elio connector on the other. Cable construction 2 mm diameter PVC sheath, with Aramid yarn strength member.
ALS-TL01-50-FC/SC-S	Test lead for use with 85/85 Light Source/Power Meter. Made in 50/125 µm fiber, 1.5 m long with FC connector on one end, SC connector on the other. Cable construction 3mm diameter PVC sheath, with Aramid yarn strength member.
ALS-TL01-62-FC/SC-S	Test lead for use with 85/85 Light Source/Power Meter. Made in 62.5/125 µm fiber, 1.5 m long with FC connector on one end, SC connector on the other. Cable construction 3mm diameter PVC sheath, with Aramid yarn strength member.
ALS-TL01-50-FC/ST-S	Test lead for use with 85/85 Light Source/Power Meter. Made in 50/125 µm fiber, 1.5 m long with FC connector on one end, ST connector on the other. Cable construction 3mm diameter PVC sheath, with Aramid yearn strength member.
ALS-TL01-62-FC/ST-S	Test lead for use with 85/85 Light Source/Power Meter. Made in 62.5/125 µm fiber, 1.5 m long with FC connectors on one end, ST connector on the other. Cable construction 3mm diameter PVC sheath, with Aramid yearn strength member.

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