CKSM-2 Contractor Series Multimode & Single-mode Test Kit with Set Reference

Combining the CSM1-2 optical power meter, CSS1-MM Dual LED light source, and CSS1-SM Dual LASER source, the CKSM-2 is a cost-effective test kit designed for performing insertion loss measurements on multimode as well as single-mode fiber optic links.

The CSS1-MM and CSS1-SM sources feature Dual output, 850 /1300 nm LED or 1310/ 1550 nm LASER respectively, from a single output port. Both CSS1 models offer 2 modes of operation, continuous wave (CW) and user selectable modulated Tone. The CSS1-MM LED and CSS1-SM LASER output ports are stabilized to ensure accurate test results per current TIA/EIA requirements. An easy to read LCD display with Backlight shows emitted wavelengths [nm], tone frequency [Hz], and Low battery condition. The CSS1-MM model output port is equipped with a fixed SC connector while the CSS1-SM output port is equipped with Universal Connector Interface (UCI) base and SC adapter.

The CSM1-2 optical power meter operates at 850/ 1300/ 1310/ 1550 nm and features multiple test Tone detection for fiber identification. The CSM1-2 stores optical references for each calibrated wavelength. An easy to read LCD display with Backlight shows measured power [dBm or µW] or insertion loss [dB], calibrated wavelengths, tone frequency [Hz], and Low battery condition. The CSM1 optical input port accepts Noyes thread-on style adapter caps. One adapter cap, 2.5 mm Universal, is included. A variety of Noyes thread-on style adapter caps (FC, SC, LC, etc.) may be ordered separately.

Weighing only 0.4 lb each, units are compact and convenient for field use. The CSS1-MM Dual LED light source, CSS1-SM Dual LASER source, and CSM1-2 optical power meter are fully N.I.S.T. traceable.

Features

- Palm-sized, rugged, lightweight
- Certify multimode and single-mode fiber links per TIA/EIA standards
- CW and modulated Tone
- 270, 330, 1000, and 2000 Hz supported Tone
- Power measurements in dBm or µW; insertion loss in dB
- Reference power level storage
- Large LCD with Backlight
- AA alkaline, optional NiMH or NiCd
- Automatic power-off function
- Battery Gauge
- Free 50 µm and 62.5 µm mandrels
- Cost-effective, easy to use
- N.I.S.T traceable

Ordering Information

Model	Includes
CKSM-2	CSS1-MM Dual LED source, CSS1-SM Dual Laser souce, CSM1-2 optical power meter, AA batteries, 2.5 mm universal adapter cap, UCI-SC connector, 50 and 62.5 µm mandrels, user's guide, and carry case.

Test jumpers and connector adapters are required for operation (purchased separately). Test jumpers with a variety of connector styles and fiber types and adapter caps for most common connectors may be purchased from AFL Telecommunications. The CKSM kits may be packed with one of cleaning kit options (purchased separately) as follows:

Model	Description	Includes
8500-20-0900	Wet Cleaning Kit	8500-10-0016, Cletop -SB
		CCTS-25-0900, Connector Cleaning Tips for 2.5mm ferrule in adapters or sockets (SC, FC, ST in adaptors).Blue (40 sticks per tube). Qty = 2 tubes
		FCC2-00-0900, Optical Quality Cleaning Fluid for fiber connector end faces.
8500-20-0901	Dry Cleaning Kit	8500-10-0016, Cletop -SB 8500-10-0024 ACT-01 2.5mm adapter cleaning tips – Qty = 200

NOYES
Test & Inspection

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CSS1-MM Specifications

Optical	CSS1-MM (single port)	
Output wavelength	850 nm ±20 nm	1300 nm +40/-60 nm
Spectral width (max)	35 nm	170 nm
Output power	⩾ -20.0 dBm into 62.5/125 fiber	
Laser classification	Class 1 (IEC 60825 - 1)	
Stability	± 0.1 dB over 1 hour (after 30 sec. typically) ± 0.15 dB over 8 hours (after 30 sec. typically)	
General		
Display type	Liquid Crystal Display w/LED Backlight	
Power	2 x AA batteries, optional NiMH or NiCd	
Battery life	30 hours typical (with 2 x AA Alkaline)	
Output connector	SC	
Operating temperature	-10 to 50°C, 90% RH (non-condensing)	
Storage temperature	-30 to 60°C, 90% RH (non-condensing)	
Size (H x W x D)	4.2 x 2.5 x 1.25 in (10.7 x 6.4 x 3.2 sm)	
Weight	0.4 lb (0.18 kg)	

All specifications at 25°C.

CSS1-SM Specifications

Optical	CSS1-SM (single port)
Output wavelength	1310 nm ±20 nm, 1550 nm ±20 nm
Spectral width (max)	5 nm
Output power	⩾ 0.0 dBm into 9/125 fiber
Laser classification	Class 1 (FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1)
Stability	± 0.05 dB typical over 1 hour (after 30 sec.) ± 0.15 dB over 8 hours (after 30 sec. typically)
General	
Display type	Liquid Crystal Display w/LED Backlight
Power	2 x AA batteries, optional NiMH or NiCd
Battery life	75 hours typical (with 2 x AA Alkaline)
Output connector	UCI base and FC, SC, ST, or LC adapter
Operating temperature	-10 to 50°C, 90% RH (non-condensing)
Storage temperature	-30 to 60°C, 90% RH (non-condensing)
Size (H x W x D)	4.2 x 2.5 x 1.25 in (10.7 x 6.4 x 3.2 sm)
Weight	0.4 lb (0.18 kg)

All specifications at 25°C.

CSM1-2 Specifications

Optical	CSM1-2
Calibrated wavelength	850, 1300, 1310, 1550 nm
Detector type	Germanium (Ge)
Measurement range	+6 to -60 dBm
Tone detect range	+6 to -50 dBm +6 to -45 dBm for 850 nm
Accuracy	± 0.3 dB*
Resolution	0.01 dB
Measurement units	dB, dBm, µW
General	
Display Type	Liquid Crystal Display w/LED Backlight
Fiber Type	Single-mode/ Multimode
Power	2 x AA batteries, optional NiMH or NiCd
Battery life	> 300 hours (with 2 x AA Alkaline)
Operating temperature	-10 to 50°C, 90% RH (non-condensing)
Storage temperature	-30 to 60°C, 90% RH (non-condensing)
Size (H x W x D)	4.2 x 2.5 x 1.25 in (10.7 x 6.4 x 3.2 sm)
Weight	0.4 lb (0.18 kg)

*Accuracy measured at 25ºC and -10 dBm per N.I.S.T. standards.

All specifications at 25°C

NOYES Test & Inspection