

AF-OS400 Series Fiber Optic Sources

Product: OS400 Series

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Rev: 01

Description

Advanced Fiber Solutions offer a complete line of sources for any testing application. The OS400 series units are cost-effective, rugged, handheld LED and laser light sources designed for performing insertion loss measurements on fiber optic links when used with an optical power meter. The LED output is stabilized to ensure accurate test results per current TIA/EIA requirements. Whether testing outside plant or premise an OS400 series optical source is the perfect tool when combined with an OM100 or OM200 series optical power meter. On each source all wavelengths are individually adjustable, with the exception of the AF-OS405, allowing the user to use less battery power when high optical output power is not necessary, or to turn up the power to test long runs. This also makes it possible for the AF-OS420 LED source to test single-mode cables up to 5km at 1300nm (AF-OS430 recommended when testing single mode systems).



These units are easy to operate with only a wavelength/ power switch on the LED sources AF-OS417MD and AF-OS420, which selects optical wavelengths or disables unit. The AF-OS405 visual fault locator operates with one front panel switch that allows the user to select between a pulsed or CW output. The AF-OS430 laser source has two front panel switches. The top switch which allows the user to select which wavelength to operate at, and the lower switch which enables the user to select between either the CW or the 2Khz output for the transmitting wavelength.

Kit Highlights and Key Features

| | |
|--|-------------------------------|
| ◦ Rugged, handheld, lightweight | ◦ Cost-effective, easy to use |
| ◦ Certify single-mode and multimode links per TIA/EIA standards | ◦ Low battery indicator |
| ◦ CW or 2 kHz modulated tone on AF-OS430 laser source | ◦ Adjustable output |
| ◦ 850nm and 1300 nm LED (multimode) light sources (660 nm available) | |

Technical Specifications



| Optical Specification | AF-OS405 | AF-OS417-MD | AF-OS420 | AF-OS420-VSCEL | AF-OS430 |
|------------------------|---|---------------------------------|---|-----------------------------|---------------------------|
| Applications | Visual Fault Loactor | Plastic, large core + multimode | Premise cable networks with multimode fiber | Gigabit Ethernet | Outside plant single mode |
| Wavelength | 635nm | 660nm/850nm | 850nm/1300nm | 850nm/1300nm | 1300nm/1550nm |
| Output Type | Laser | LED | LED | Laser/LED | Laser |
| Modulated Frequencies | 1hz/CW | CW | CW | CW | 2khz/CW |
| Stability Per Hour | Less than 0.5dB | Less than 0.5dB | Less than 0.05dB | Less than 0.1dB | Less than 0.05dB |
| Power Output | 1mW max | >-17dBm @ 850 | >-17dBm | >-5dBm @850 >-17dBm@1300 | >-8dBm |
| Connector Style | ST/FC/SC | Modular @665 ST @850 | ST | ST/SC/FC @850 ST @1300 | ST/SC/FC |
| All Units | | | | | |
| Controls | Front panel slide switches | | | | |
| Power | 2AA Batteries or AC Power Converter | | | | |
| Low Battery Indicator | Yes | | | | |
| Protective Rubber Boot | Yes | | | | |
| Enclosure Size | Compact Handheld (L-4.94"/W-2.75"/H-1.2") | | | | |

| Temperature Specifications | |
|-----------------------------------|--|
| Operation Temperature | -10°C to +50°C (45% Hum, non condensing) |
| Storage Temperature | -20°C to +60°C (75% Hum, non condensing) |

Ordering Information

| Model Number | Output Wavelength(nm) | Output Type | Output Power |
|-------------------------|-----------------------|-------------|-----------------|
| AF-OS405-(ST/FC or SC)* | 635nm | Laser | 1mW max |
| AF-OS417-MD | 660nm/850nm | LED | >-17dBm @ 850nm |
| AF-OS420 | 850nm/1300nm | LED | >-17dBm |
| AF-OS420-VSCEL | 850nm/1300nm | Laser/LED | >-5dBm/-17dBm |
| AF-OS430-(ST/FC or SC)* | 850nm/1300nm | Laser | >-8dBm |

* User selectable outputs which are factory fixed – available options → ST, FC or SC.