1430 nm Wavelength Optical Reflector

Features

- Single-mode female-to-male SC-APC
- Reflects ≥70% of 1430 ±7 nm wavelength
- Transparent (≤1.0 dB loss) to PON signal wavelengths

Applications

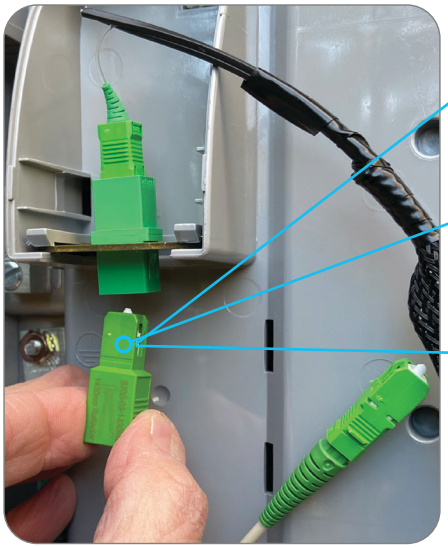
Optical reflection point for single-ended fiber continuity verification and insertion loss test in the following applications

- Fiber-to-the-Home (FTTH)
- Fiber-to-the-Antenna (FTTA)
- Fiber backhaul demarcation point

AFL's 1430 nm Wavelength Optical Reflector is used in conjunction with test devices, such as AFL's FlowScout SE100 continuity and insertion loss test set. It uses Fiber Bragg Grating technology to support testing over the wavelength range around 1430 nm. With the reflector used at one end of a fiber under test, a technician can verify fiber continuity and measure insertion loss to the reflector using the FlowScout SE100.

The reflector is intended for installation at the subscriber end of FTTH, atop cell tower fibers for FTTA, or at fiber backhaul demarcation points. This enables troubleshooting, continuity verification, and insertion loss testing without requiring visits to subscriber premises, demarcation points or climbing cell towers.

Since the reflector is designed for 1430 nm reflectance, it is transparent to PON signal and other fiber optic signal wavelengths. The reflector can remain in place after the initial fiber installation, enabling faster troubleshooting, as technicians need to only visit one end of the fiber.

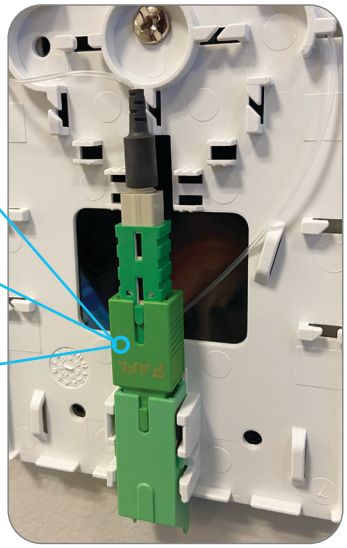


Exterior NID

Small Size
Ultra small AFl's 1430 nm Optical Reflector easily installs into wall plate or NID

Single-mode female-to-male SC-APC
Single-mode Optical Reflector used in conjunction with test devices such as AFL's FlowScout SE100

Transparent to PON signal
May remain in place after initial fiber installation for easy troubleshooting

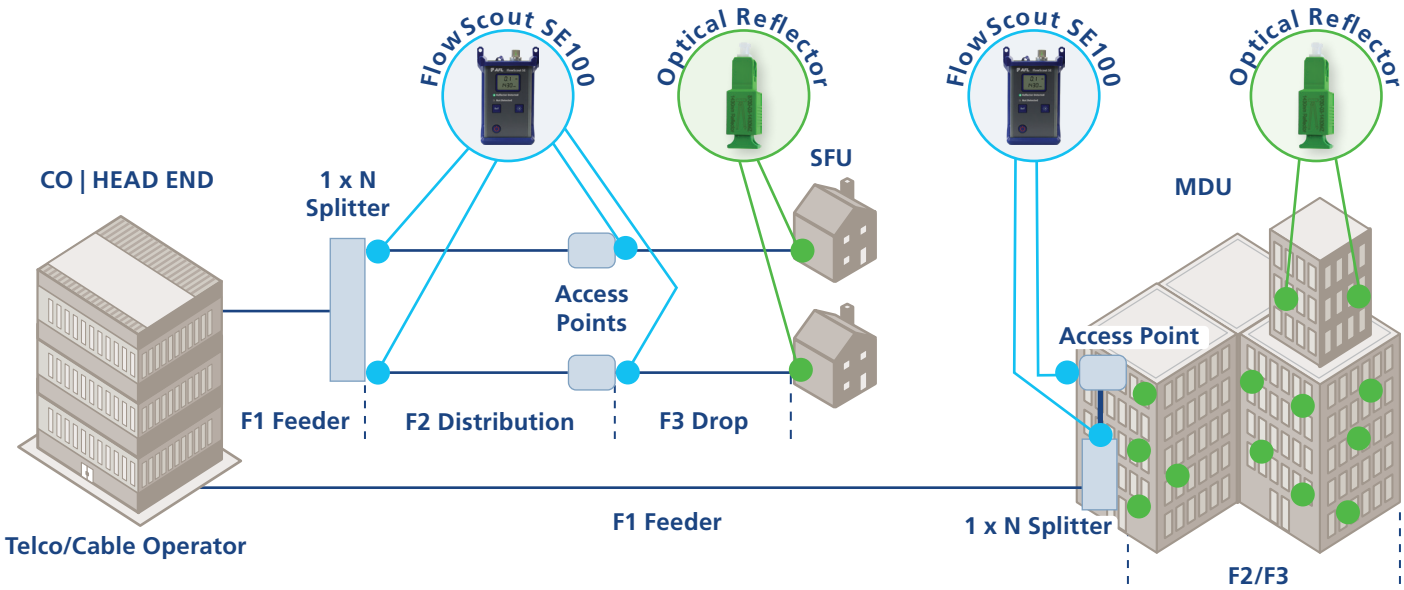


Interior Wall Plate

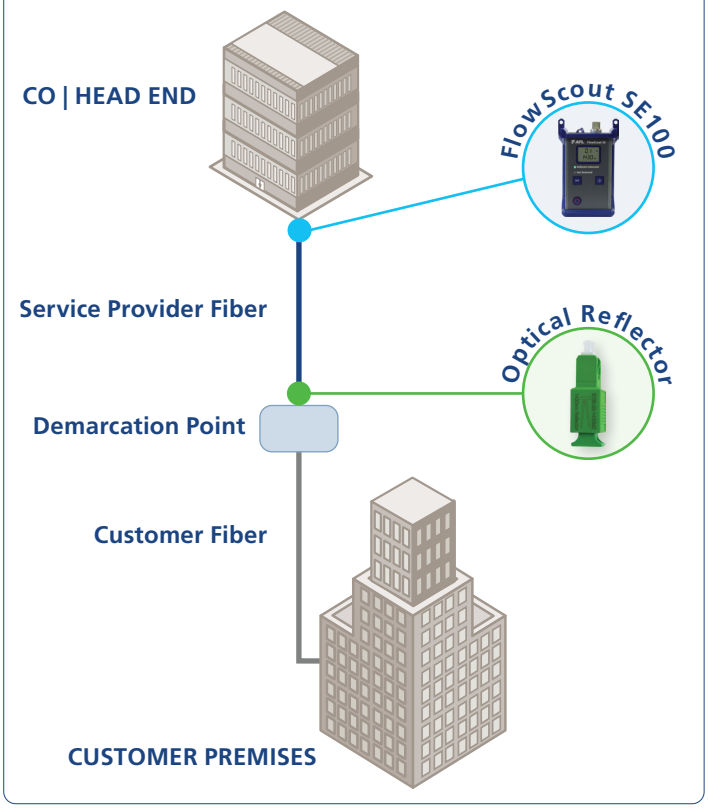
1430 nm Wavelength Optical Reflector

Example Applications

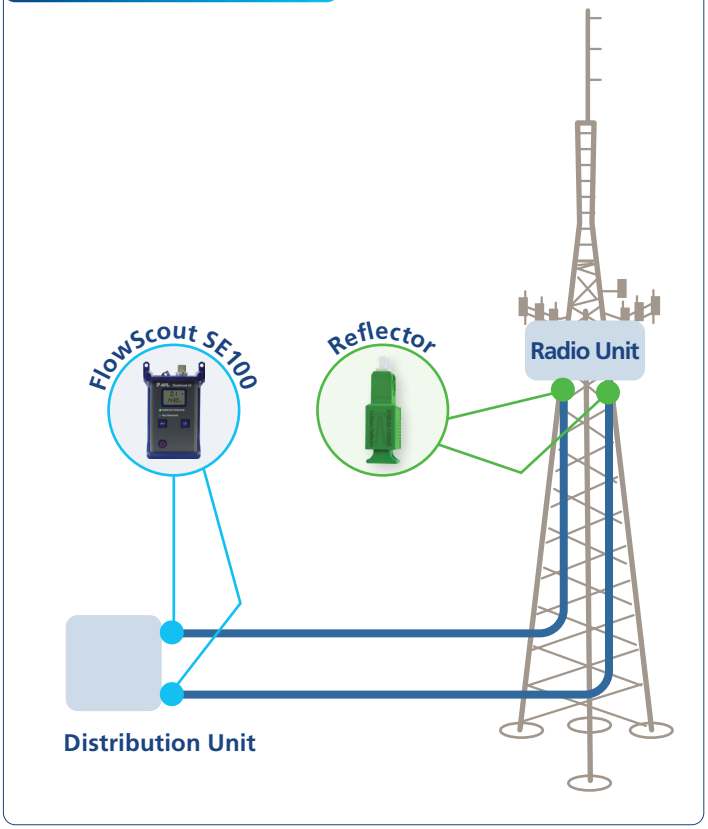
FIBER-TO-THE-HOME



FIBER BACKHAUL



FIBER-TO-THE-ANTENNA



1430 nm Wavelength Optical Reflector

Specifications[a]

OPTICAL	
Fiber Type	Single-mode G.657.A1; Compatible with G.652.A/B/C/D
Reflectance Band Wavelength Range	1423 – 1437 nm
Reflectance Band Insertion Loss	≥15 dB (1423-1437 nm)
Reflectance Band ORL	0.9 ±0.4 dB @ 1430 nm; ≤1.5 dB (1423-1437 nm)
Pass Band Wavelength Range	1260 – 1365 nm; 1450 – 1655 nm
Pass Band Insertion Loss	≤1.0 dB (1260-1365 nm; 1450-1655 nm)
Pass Band ORL	≥35 dB (1260-1365 nm) ≥32 dB (1480-1500 nm; 1540-1564 nm; 1575-1581 nm, 1600-1655 nm)
Pass Band Ripple	≤0.6 dB (1260 – 1365 nm; 1450 – 1600 nm)
PDL	≤0.4 dB (1260-1365 nm; 1450-1600 nm)
PMD	≤0.2 ps (1260-1365 nm; 1450-1600 nm)
Max Optical Power without damage	+27 dBm
Connector	SC-APC female (receptacle) to male (plug) with dust caps
GENERAL	
Operating Conditions	-25 °C to +65 °C, 5-95% RH
Storage Temperature	-45 °C to +85 °C, 5-95% RH
Dimensions	31.8 x 12.8 x 7.5 mm
Weight	0.59 kg (1.3 lb)

Notes:
a. All specifications valid at 25°C unless otherwise specified.

Ordering Information

DESCRIPTION	AFL NO.
1430 nm Wavelength Optical Reflector, SC/APC, female-to-male, plug type	8700-03-1430MZ

Recommended Products

FlowScout™ SE100 Single-Ended Test Set

- Fiber continuity verification and insertion loss testing from a single endpoint at 1430 nm
- Excess reflection (low ORL) detection at 1550 nm
- Live fiber detection and reporting

One-Click® Cleaners

- Patented single-action
- Variety of sizes and types
- Low cost per clean

Qualifications

CATEGORY	REGULATION/STANDARD	QUALIFICATION
RoHS	EU	Compliant to EU regulations Directive 2011/65/EU (RoHS 2) and Directive 2015/863 (RoHS 3)

Contact Sales@AFLglobal.com to schedule a demonstration or learn how to buy.

Visit www.AFLglobal.com/Test to learn more about complementary AFL fiber optic test and inspection products.

International Sales and Service Contact Information available at www.AFLglobal.com/Test/Contacts