

# FSFP Series Transceivers

## INTERCHANGEABLE SMALL FORM-FACTOR PLUGGABLE MODULES

### Product Features

- Interchangeable FSFP Transceivers to Match Media Type, Fiber Count, Fiber Path Length, and Connector Type
- Operating Temperature of  $-40^{\circ}$  to  $75^{\circ}\text{C}$  ( $-40^{\circ}$  to  $167^{\circ}\text{F}$ )
- No Performance Adjustments Required
- Multi-Source Agreement (MSA) Compliant
- Compliant with IEEE 802.3 Standards



FSFP-EFMM2LC2

The **FSFP Series** transceivers are MSA-compliant, small form-factor pluggable (FSFP) modules that allow for an optical or copper interface when using a Pelco unmanaged switch or media converter. These interchangeable FSFP transceivers are available for use with unshielded twisted pair (UTP) cable, multimode optical fiber, or single-mode optical fiber. The optical **FSFP Series** transceivers are available in Fast Ethernet one- and two-fiber versions, and Gigabit Ethernet one- and two-fiber versions. The transceivers are available with RJ-45, LC, or SC ports, and offer wavelengths and optical power budgets to meet distance requirements from 500 meters to 120 kilometers (984 ft to 74.5 mi). The **FSFP Series** transceivers are industrially rated to perform in the most difficult operating environments. The Pelco FSFP interface is required for use with all Pelco FSFP configurable products to qualify for the manufacturer's warranty.

The **FSFP Series** transceivers are ideal for transportation, airport, and college campus applications.

# TECHNICAL SPECIFICATIONS

## MODELS

Transmitter/Receiver	Data Rate (Mbps)	Transmission Medium*	Number of Fibers	Connector Type	Maximum Transmission Distance	Transmit/Receive Wavelength	TX Power (dBm)	RX Sensitivity (dBm)	Opt. Loss Budget (dB)	Model Number	
Either	10/100/1000	Copper	N/A	RJ-45	IEEE 802.3	N/A	N/A	N/A	N/A	FSFP-EGRJ45	
	100	Single Mode	2	LC	20 km (12.4 mi)	1310 nm	-15	≤-31	16	FSFP-EFSM2LC20	
				LC	40 km (24.9 mi)	1310 nm	-14	≤-34	20	FSFP-EFSM2LC40	
				LC	80 km (49.7 mi)	1550 nm	-5	≤-31	26	FSFP-EFSM2LC80	
	1000	Single Mode		Multimode	LC	2 km (1.2 mi)	1310 nm	-19	≤-30	11	FSFP-EFMM2LC2
				Single Mode	LC	15 km (9.3 mi)	1310 nm	-8	≤-24	16	FSFP-EGSM2LC15
					LC	40 km (24.9 mi)	1310 nm	-5	≤-24	19	FSFP-EGSM2LC40
					LC	70 km (43.5 mi)	1550 nm	0	≤-24	24	FSFP-EGSM2LC70
					LC	120 km (74.5 mi)	1550 nm	0	≤-32	32	FSFP-EGSM2LC120
					LC	550 m† (1804.5 ft)	850 nm	-9.5	≤-17	7.5	FSFP-EGMM2LC.55
Transmitter					100	Single Mode	1	LC	20 km (12.4 mi)	1310 nm/1550 nm	-14
	LC	60 km (37.3 mi)	1310 nm/1550 nm	-5				≤-34	29	FSFP-AFSM1LC60	
	SC	60 km (37.3 mi)	1310 nm/1550 nm	-5				≤-34	29	FSFP-AFSM1SC60	
	SC	20 km (12.4 mi)	1310 nm/1550 nm	-15				≤-34	19	FSFP-AFSM1SC20	
	SC	2 km (1.2 mi)	1310 nm/1550 nm	-15				≤-30	15	FSFP-AFMM1SC2	
	1000	Single Mode	LC	20 km (12.4 mi)	1310 nm/1550 nm	-8		≤-22	14	FSFP-AGSM1LC20	
			LC	60 km (37.3 mi)	1310 nm/1550 nm	-1		≤-26	25	FSFP-AGSM1LC60	
			SC	20 km (12.4 mi)	1310 nm/1550 nm	-8		≤-22	14	FSFP-AGSM1SC20	
			SC	60 km (37.3 mi)	1310 nm/1550 nm	-1		≤-26	25	FSFP-AGSM1SC60	
			Receiver	100	Single Mode	1		LC	20 km (12.4 mi)	1550 nm/1310 nm	-14
LC	60 km (37.3 mi)	1550 nm/1310 nm					-6	≤-34	28	FSFP-BFSM1LC60	
SC	60 km (37.3 mi)	1550 nm/1310 nm					-6	≤-34	28	FSFP-BFSM1SC60	
SC	20 km (12.4 mi)	1550 nm/1310 nm					-15	≤-34	19	FSFP-BFSM1SC20	
1000	Single Mode	SC		2 km (1.2 mi)	1550 nm/1310 nm		-15	≤-30	15	FSFP-BFMM1SC2	
		LC		20 km (12.4 mi)	1550 nm/1310 nm		-8	≤-22	14	FSFP-BGSM1LC20	
		LC		60 km (37.3 mi)	1550 nm/1310 nm		-3	≤-26	23	FSFP-BGSM1LC60	
		SC		20 km (12.4 mi)	1550 nm/1310 nm		-8	≤-22	14	FSFP-BGSM1SC20	
		SC		60 km (37.3 mi)	1550 nm/1310 nm		-3	≤-26	23	FSFP-BGSM1SC60	

\*Multimode fiber must meet or exceed fiber standard ITU-T G.651. Single mode fiber must meet or exceed fiber standard ITU-T G.652.

† 550 m (1804.5 ft) using laser-optimized 50/125µm fiber; 300 m (984.2 ft) using 62.5/125µm fiber.

## CERTIFICATIONS/RATINGS

- CE, Class E
- FCC, Part 15
- UL Listed
- IEEE 802.3
- Complies with 21 CFP 1040.10 and 1040.11

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**Pelco, Inc.**  
 625 W. Alluvial, Fresno, California 93711 United States  
**USA & Canada** Tel (800) 289-9100 Fax (800) 289-9150  
**International** Tel +1 (559) 292-1981 Fax +1 (559) 348-1120  
[www.pelco.com](http://www.pelco.com) [www.pelco.com/community](http://www.pelco.com/community)

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