

# IM-6700A Series

**Fast Ethernet modules for IKS-6726A-2GTXSFP/IKS-6728A-4GTXSFP/  
IKS-6728A-8PoE-4GTXSFP series switches**

## Specifications

### Fast Ethernet Interface Modules, IM-6700A series



IM-6700A-8TX



IM-6700A-8SFP\*



IM-6700A-6SSC  
IM-6700A-6MSC



IM-6700A-6MST



IM-6700A-2MSC4TX  
IM-6700A-2SSC4TX



IM-6700A-2MST4TX



IM-6700A-4MSC2TX  
IM-6700A-4SSC2TX



IM-6700A-4MST2TX



IM-6700A-8PoE\*\*

\*See the SFP-1FE datasheet for Fast Ethernet module product information.

\*\*IM-6700A-8PoE is supported by the IKS-6728A-8PoE series

### Interface

**RJ45 Ports:** 10/100BaseT(X) auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection

**Fiber Ports:** 100BaseFX ports (SC/ST or SFP LC connector)

**PoE Ports:** 10/100BaseT(X) auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection, IEEE 802.3af/at standards, Mode A

### Optical Fiber

		100BaseFX		
		Multi-Mode		Single-Mode
Fiber Cable Type		OM1	50/125 μm 800 MHz*km	G.652
		Typical Distance		4 km
Wave-length	Typical (nm)	1300		1310
	TX Range (nm)	1260 to 1360	1280 to 1340	
	RX Range (nm)	1100 to 1600	1100 to 1600	
Optical Power	TX Range (dBm)	-10 to -20	0 to -5	
	RX Range (dBm)	-3 to -32	-3 to -34	
	Link Budget (dB)	12	29	
	Dispersion Penalty (dB)	3	1	

Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.  
Note: Compute the "typical distance" of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).

### Power Requirements

#### Power Consumption:

IM-6700A-8TX: 1.21 W  
IM-6700A-8PoE: 1.21 W (w/o PoE output)  
IM-6700A-8SFP: 0.92 W  
IM-6700A-6MSC/6MST/6SSC: 7.57 W  
IM-6700A-4MSC2TX/4MST2TX/4SSC2TX: 5.28 W  
IM-6700A-2MSC4TX/2MST4TX/2SSC4TX: 3.19 W

### Physical Characteristics

#### Weight:

IM-6700A-8TX: 225 g (0.50 lb)  
IM-6700A-8PoE: 260 g (0.58 lb)  
IM-6700A-8SFP: 295 g (0.65 lb)  
IM-6700A-6MSC-6MSC/6MST/6SSC: 390 g (0.86 lb)  
IM-6700A-4MSC2TX-4MSC2TX/4MST2TX/4SSC2TX: 270 g (0.60 lb)  
IM-6700A-2MSC4TX-2MSC4TX/2MST4TX/2SSC4TX: 270 g (0.60 lb)

### Reliability

#### MTBF (mean time between failures):

IM-6700A-8TX: 10,412,400 hrs  
IM-6700A-8SFP: 3,510,110 hrs  
IM-6700A-6MSC: 366,119 hrs  
IM-6700A-6MST: 365,741 hrs  
IM-6700A-6SSC: 365,741 hrs  
IM-6700A-4MSC2TX: 530,268 hrs  
IM-6700A-4MST2TX: 537,942 hrs  
IM-6700A-2MSC4TX: 1,031,180 hrs  
IM-6700A-2MST4TX: 1,031,180 hrs  
IM-6700A-2SSC4TX: 1,031,180 hrs  
IM-6700A-8PoE: 338,800 hrs

**Database:** Telcordia (Bellcore), GB

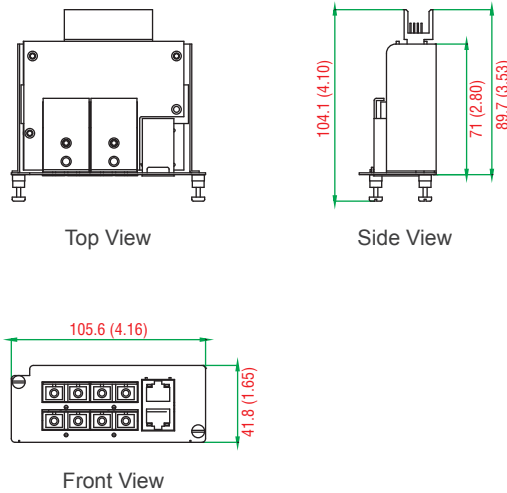
### Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

## Dimensions

Unit: mm (inch)



## Ordering Information

### Compatible Rackmount Ethernet Switch Systems

#### Modular Rackmount Ethernet Switch System:

IKS-6726A-2GTXSFP



IKS-6728A-4GTXSFP



IKS-6728A-8PoE



### Fast Ethernet Modules, IM-6700A Series

Available Models	Port Interface				
	10/100BaseT(X)	100BaseFX			100BaseSFP*
		Multi-Mode, SC Connector	Multi-Mode, ST Connector	Single-Mode, SC Connector	
IM-6700A-8TX	8	–	–	–	–
IM-6700A-8SFP	–	–	–	–	8
IM-6700A-6MSC	–	6	–	–	–
IM-6700A-6MST	–	–	6	–	–
IM-6700A-6SSC	–	–	–	6	–
IM-6700A-4MSC2TX	2	4	–	–	–
IM-6700A-4MST2TX	2	–	4	–	–
IM-6700A-4SSC2TX	2	–	–	4	–
IM-6700A-2MSC4TX	4	2	–	–	–
IM-6700A-2MST4TX	4	–	2	–	–
IM-6700A-2SSC4TX	4	–	–	2	–
IM-6700A-8PoE	8 (PoE+ ports)	–	–	–	–

#### Package Checklist

- IM-6700A series interface module
- Warranty card

# SFP-1FE Series

## 1-port Fast Ethernet SFP modules



- > Digital Diagnostic Monitor Function
- > IEEE 802.3u compliant
- > Differential PECL inputs and outputs
- > TTL signal detect indicator
- > Hot pluggable LC duplex connector
- > Class 1 laser product; complies with EN 60825-1



### Specifications

#### Interface

Ethernet Ports: 1

Connectors: Duplex LC Connector

#### Optical Fiber

	Fast Ethernet SFP			
	SFP-M		SFP-S	SFP-L
Transceiver Type	Multi-Mode		Single-Mode	
Fiber Cable Type	OM1/OM2	62.5/125, 50/125 μm	G.652	G.652
		800 MHz* km		
Typical Distance	2 km	4 km	40 km	80 km
Wave-length	Typical (nm)	1310	1310	1550
	TX Range (nm)	1280 to 1340	1280 to 1340	1530 to 1570
	RX Range (nm)	1100 to 1650	1100 to 1600	1100 to 1600
Optical Power	TX Range (dBm)	-8 to -18	0 to -5	0 to -5
	RX Range (dBm)	-3 to -32	-3 to -34	-3 to -34
	Link Budget (dB)	14	29	29
	Dispersion Penalty (dB)	2	3	1

Note: When connecting the SFP-S or L, we recommend using an attenuator to prevent damage caused by excessive optical power.

#### Power Requirements

Power Consumption: Max. 1 W

#### Environmental Limits

Operating Temperature: -40 to 85°C (-40 to 185°F)

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

#### Standards and Certifications

Safety: CE, FCC, TÜV, UL 60950-1

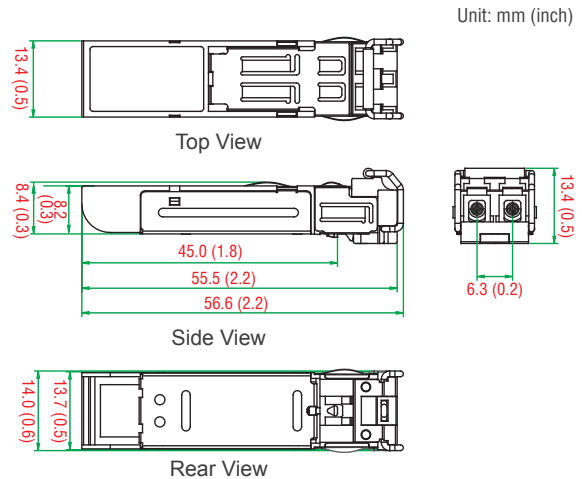
Marine: DNV, GL

#### Warranty

Warranty Period: 5 years

Details: See [www.moxa.com/warranty](http://www.moxa.com/warranty)

#### Dimensions



### Ordering Information

Available Models	Port Interface		
	100BaseFX, Multi-Mode, LC Connector, 4 km	100BaseFX, Single-Mode, LC Connector, 40 km	100BaseFX, Single-Mode, LC Connector, 80 km
SFP-1FEMLC-T	1	-	-
SFP-1FESLC-T	-	1	-
SFP-1FELLC-T	-	-	1

#### Package Checklist

- SFP-1FE module
- Warranty card