

# Industrial SFP Transceiver



- Fully tested with CTC industrial grade product for guaranteed compatibility and performance. The best performance can be guaranteed even in mission-critical applications
- Eye safety compliant with Class 1 laser product standard IEC825-1
- CE, FCC class B certification



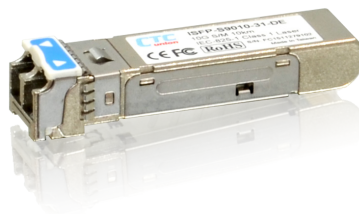
Ver.2022 Jan

CTC Union's industrial SFP Transceivers are highly reliable, for serial optical data communications applications specified for single mode fiber operation at 1.25G/155M bps. They operate with +3.3V power supplies and are intended for single mode or multi-mode fiber, operating at a nominal wavelength of 1310nm/1550nm/850nm. Each SFP Transceiver consists of a transmitter optical subassembly (TOSA), a receiver optical subassembly (ROSA) and an electrical subassembly. CTC Union's industrial SFP transceivers ensure your networks operate with maximum reliability, performance, and flexibility.

## Features

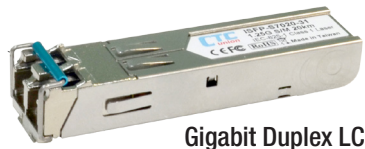
- Single 3.3V power supply
- Duplex or Simplex LC receptacle connector
- Hot Pluggable
- Lower power dissipation
- All 10G SFP+ compliant to IEEE 802.3ae 10GBase-X Ethernet over fiber
- All Gigabit SFP compliant to IEEE 802.3z 1000Base-X and IEEE 802.3ab 100/1000Base-T
- All Fast Ethernet SFP Compliant to IEEE 802.3u 100Base-FX
- Industrial standard small form pluggable (SFP) package
- Compliant with Multi-Source Agreement (MSA) Small Form Factor Pluggable (SFP)
- RoHS compliant

## 10Gbps 10GBase-X Fiber SFP+



Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Power Consumption	DDMI	Operating Temperature
ISFP-M9000-85-D	MM	300m (OM3)	850	-6.5 ~ -1	-9.9	3.4	-1	1W	V	-10 ~ 70°C
ISFP-M9000-85-DE	MM	300m (OM3)	850	-6.5 ~ -1	-9.9	3.4	-1	1W	V	-40 ~ 85°C
ISFP-S9010-31-D	SM	10km	1310	-8 ~ 0.5	-14.4	6.4	0.5	1W	V	-10 ~ 70°C
ISFP-S9010-31-DE	SM	10km	1310	-8 ~ 0.5	-14.4	6.4	0.5	1W	V	-40 ~ 85°C
ISFP-S9040-31-D	SM	40km	1310	0.5 ~ 5	-15.5	16	0.5	1W	V	-10 ~ 70°C
ISFP-S9040-31-DE	SM	40km	1310	0.5 ~ 5	-15.5	16	0.5	1W	V	-40 ~ 85°C
ISFP-S9040-55-D	SM	40km	1550	-2 ~ 4	-15.8	13.8	0.5	1W	V	-10 ~ 70°C
ISFP-S9040-55-DE	SM	40km	1550	-2 ~ 4	-15.8	13.8	0.5	1W	V	-40 ~ 85°C

## 1.25Gbps 1000Base-X Fiber SFP



Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Power Consumption	DDMI	Operating Temperature
ISFP-M7000-85-D	MM	550m	850	-9.5 ~ -4	-17	7.5	-3	1W	V	-10 ~ 70°C
ISFP-M7000-85-DE	MM	550m	850	-9.5 ~ -4	-17	7.5	-3	1W	V	-40 ~ 85°C
ISFP-M7002-31-D	MM	2km	1310	-9 ~ -1	-19	10	-1	1W	V	-10 ~ 70°C
ISFP-M7002-31-DE	MM	2km	1310	-9 ~ -1	-19	10	-1	1W	V	-40 ~ 85°C
ISFP-S7020-31-D	SM	20km	1310	-8 ~ -2	-23	15	-1	1W	V	-10 ~ 70°C
ISFP-S7020-31-DE	SM	20km	1310	-8 ~ -2	-23	15	-1	1W	V	-40 ~ 85°C
ISFP-S7040-31-D	SM	40km	1310	-2 ~ 3	-23	21	-3	1W	V	-10 ~ 70°C
ISFP-S7040-31-DE	SM	40km	1310	-2 ~ 3	-23	21	-3	1W	V	-40 ~ 85°C
ISFP-S7020-WA-D	SM (BiDi)	20km	T1310 / R1550	-8 ~ -2	-23	15	-2	1W	V	-10 ~ 70°C
ISFP-S7020-WB-D	SM (BiDi)	20km	T1550 / R1310	-8 ~ -2	-23	15	-2	1W	V	-10 ~ 70°C
ISFP-S7020-WA-DE	SM (BiDi)	20km	T1310 / R1550	-8 ~ -2	-23	15	-2	1W	V	-40 ~ 85°C
ISFP-S7020-WB-DE	SM (BiDi)	20km	T1550 / R1310	-8 ~ -2	-23	15	-2	1W	V	-40 ~ 85°C
ISFP-S7040-WA-D	SM (BiDi)	40km	T1310 / R1550	-3 ~ 2	-23	20	-3	1W	V	-10 ~ 70°C
ISFP-S7040-WB-D	SM (BiDi)	40km	T1550 / R1310	-3 ~ 2	-23	20	-3	1W	V	-10 ~ 70°C
ISFP-S7040-WA-DE	SM (BiDi)	40km	T1310 / R1550	-3 ~ 2	-23	20	-3	1W	V	-40 ~ 85°C
ISFP-S7040-WB-DE	SM (BiDi)	40km	T1550 / R1310	-3 ~ 2	-23	20	-3	1W	V	-40 ~ 85°C
ISFP-S7060-WA-D	SM (BiDi)	60km	T1310 / R1550	0 ~ 5	-24	24	-1	1W	V	-10 ~ 70°C
ISFP-S7060-WB-D	SM (BiDi)	60km	T1550 / R1310	0 ~ 5	-24	24	-1	1W	V	-10 ~ 70°C
ISFP-S7060-WA-DE	SM (BiDi)	60km	T1310 / R1550	0 ~ 5	-24	24	-1	1W	V	-40 ~ 85°C
ISFP-S7060-WB-DE	SM (BiDi)	60km	T1550 / R1310	0 ~ 5	-24	24	-1	1W	V	-40 ~ 85°C

## 1.25Gbps 100/1000Base-T UTP SFP



Model Name	Cable Type	Typical Distance	Power Consumption	Operating Temperature
ISFP-T7T00-00	UTP Cat 5e	100m	1.1W	-10 ~ 70°C
ISFP-T7T00-00-E	UTP Cat 5e	100m	1.1W	-40 ~ 85°C

## 155Mbps 100Base-FX Fiber SFP



Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Power Consumption	DDMI	Operating Temperature
ISFP-M5002-31-D	MM	2km	1310	-20 ~ -14	-32	12	-8	1W	V	-10 ~ 70°C
ISFP-M5002-31-DE	MM	2km	1310	-20 ~ -14	-32	12	-8	1W	V	-40 ~ 85°C
ISFP-S5030-31-D	SM	30km	1310	-15 ~ -8	-34	19	-5	1W	V	-10 ~ 70°C
ISFP-S5030-31-DE	SM	30km	1310	-15 ~ -8	-34	19	-5	1W	V	-40 ~ 85°C
ISFP-S5050-31-D	SM	50km	1310	-5 ~ 0	-35	30	-5	1W	V	-10 ~ 70°C
ISFP-S5050-31-DE	SM	50km	1310	-5 ~ 0	-35	30	-5	1W	V	-40 ~ 85°C
ISFP-S5020-WA-D	SM (BiDi)	20km	T1310 / R1550	-14 ~ -8	-32	18	-3	1W	V	-10 ~ 70°C
ISFP-S5020-WB-D	SM (BiDi)	20km	T1550 / R1310	-14 ~ -8	-32	18	-3	1W	V	-10 ~ 70°C
ISFP-S5020-WA-DE	SM (BiDi)	20km	T1310 / R1550	-14 ~ -8	-32	18	-3	1W	V	-40 ~ 85°C
ISFP-S5020-WB-DE	SM (BiDi)	20km	T1550 / R1310	-14 ~ -8	-32	18	-3	1W	V	-40 ~ 85°C