



# Industrial SFP Transceiver

1.25G 1000Base-X for Optic  
 1.25G 1000Base-T for Copper  
 155Mbps 100Base-FX for Optic

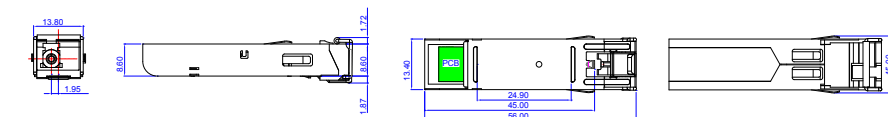
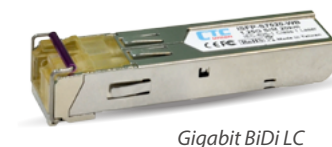
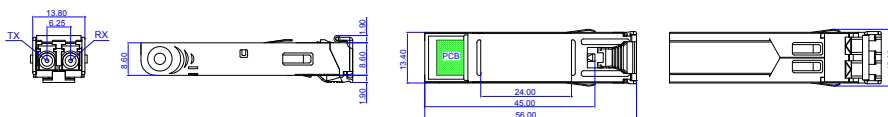
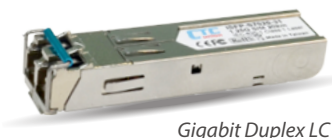
Industrial SFP Transceiver

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

- All SFPs have been tested with the best operating performance on CTC Union's Industrial switches
- Single 3.3V power supply
- Duplex or Simplex LC receptacle connector
- Hot Pluggable
- Lower power dissipation
- All Gigabit SFP compliant to IEEE802.3z 1000Base-X and IEEE802.3ab 1000Base-T
- All Fast Ethernet SFP Compliant to IEEE802.3u 100Base-FX
- Industrial standard small form pluggable (SFP) package
- Compliant with Multi-Source Agreement (MSA) Small Form Factor Pluggable (SFP)
- Eye safety compliant with Class 1 laser product standard IEC825-1
- CE, FCC class B certification
- RoHS compliant
- 5 years warranty

## Gigabit Ethernet SFP



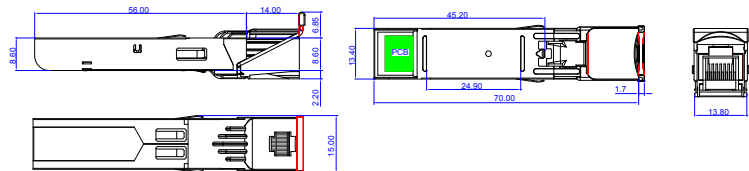
### 1.25G 1000Base-X

Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Operating Temperature
ISFP-M7000-85	MM	550m	850	-9.5~-4	-17	7.5	-3	-10~70°C
ISFP-M7002-31	MM	2km	1310	-9~-1	-19	10	-1	-10~70°C
ISFP-S7020-31	SM	20km	1310	-8~-2	-23	15	-1	-10~70°C
ISFP-S7040-31	SM	40km	1310	-2~3	-23	21	-3	-10~70°C
ISFP-S7080-55	SM	80km	1550	0~5	-24	24	-3	-10~70°C
ISFP-S7020-WA	SM	20km	T1310 / R1550	-8~-2	-23	15	-2	-10~70°C
ISFP-S7020-WB	SM	20km	T1550 / R1310	-8~-2	-23	15	-2	-10~70°C
ISFP-S7040-WA	SM	40km	T1310 / R1550	-3~-2	-23	20	-1	-10~70°C
ISFP-S7040-WB	SM	40km	T1550 / R1310	-3~-2	-23	20	-1	-10~70°C
ISFP-M7000-85-E	MM	550m	850	-9.5~-4	-17	7.5	-3	-40~85°C
ISFP-M7002-31-E	MM	2km	1310	-9~-1	-19	10	-1	-40~85°C
ISFP-S7020-31-E	SM	20km	1310	-8~-2	-23	15	-1	-40~85°C
ISFP-S7040-31-E	SM	40km	1310	-2~3	-23	21	-3	-40~85°C
ISFP-S7080-55-E	SM	80km	1550	0~5	-24	24	-3	-40~85°C
ISFP-S7020-WA-E	SM	20km	T1310 / R1550	-8~-2	-23	15	-2	-40~85°C
ISFP-S7020-WB-E	SM	20km	T1550 / R1310	-8~-2	-23	15	-2	-40~85°C
ISFP-S7040-WA-E	SM	40km	T1310 / R1550	-3~-2	-23	20	-1	-40~85°C
ISFP-S7040-WB-E	SM	40km	T1550 / R1310	-3~-2	-23	20	-1	-40~85°C

## Gigabit Ethernet SFP



Gigabit Copper



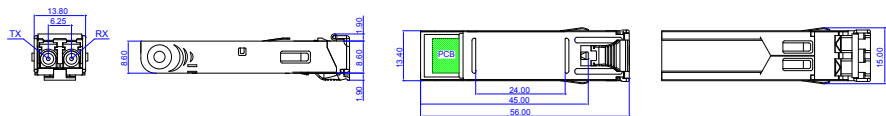
### 1.25G 1000Base-T

Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Operating Temperature
ISFP-T7T00-00	Copper	100m	---	---	---	---	---	-10~70°C
ISFP-T7T00-00-E	Copper	100m	---	---	---	---	---	-40~85°C

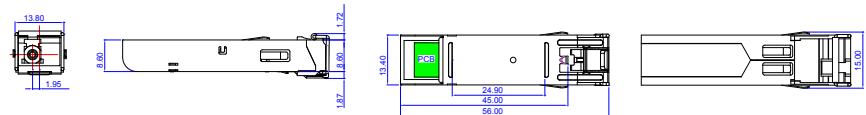
## Fast Ethernet SFP



Duplex LC



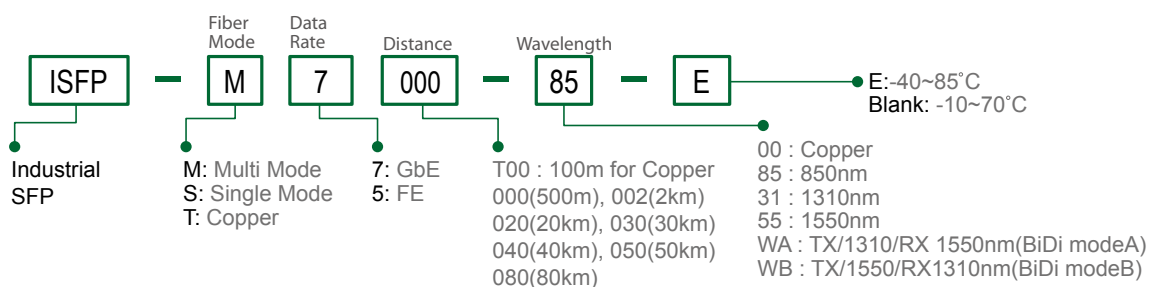
BiDi LC



### 155Mbps 100Base-FX

Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Operating Temperature
ISFP-M5002-31	MM	2km	1310	-20~-14	-32	12	-8	-10~70°C
ISFP-S5030-31	SM	30km	1310	-15~-8	-34	19	-5	-10~70°C
ISFP-S5050-31	SM	50km	1310	-5~0	-35	30	-5	-10~70°C
ISFP-S5020-WA	SM	20km	T1310 / R1550	-14~-8	-32	18	-3	-10~70°C
ISFP-S5020-WB	SM	20km	T1550 / R1310	-14~-8	-32	18	-3	-10~70°C
ISFP-S5040-WA	SM	40KM	T1310 / R1550	-8~0	-34	26	0	-10~70°C
ISFP-S5040-WB	SM	40KM	T1550 / R1310	-8~0	-34	26	0	-10~70°C
ISFP-M5002-31-E	MM	2km	1310	-20~-14	-32	12	-8	-40~85°C
ISFP-S5030-31-E	SM	30km	1310	-15~-8	-34	19	-5	-40~85°C
ISFP-S5050-31-E	SM	50km	1310	-5~0	-35	30	-5	-40~85°C
ISFP-S5020-WA-E	SM	20km	T1310 / R1550	-14~-8	-32	18	-3	-40~85°C
ISFP-S5020-WB-E	SM	20km	T1550 / R1310	-14~-8	-32	18	-3	-40~85°C
ISFP-S5040-WA-E	SM	40KM	T1310 / R1550	-8~0	-34	26	0	-40~85°C
ISFP-S5040-WB-E	SM	40KM	T1550 / R1310	-8~0	-34	26	0	-40~85°C

## Industrial SFP naming rule



## Ordering Information

ISFP - □□□□□ - □□ - □

Example: ISFP - M7000 - 85 - E