

# DR-120-24, DR-4524, MDR-40-24, MDR-60-24, DRP-240-48

## DIN-Rail Power Supplies



DR-120-24 DR-4524 MDR-40-24 MDR-60-24 DRP-240-48

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Industrial Power  
Supply

Having reliable and stable power for your industrial grade converters is the best way to improve reliability and keep any down time to a minimum. CTC Union's safety certified AC to DC power supplies that are 100% compatible with all of our industrial grade switches and converters.

### Features

- Protections: Short circuit / Overload / Over voltage
- LED indicator for power on
- Cooling by free air convection
- Installation mounting by Din Rail
- UL508, UL60950-1, CE approved
- Heavy industry grade EMS approved
- 3 years warranty

### Specifications

Model Name		DRP-240-48	DR-120-24	DR-4524
Output	Dc Voltage	48V	24V	24V
	Rated Current	5A	5A	2A
	Current Range	0~5A	0 ~ 5A	0 ~ 2A
	Rated Power	240W	120W	48W
	Output Voltage Adj. Range	48~53V	24 ~ 28V	21.6 ~ 26.4V
Input	Voltage Range	85 ~ 264VAC / 120 ~ 370VDC	88 ~ 132VAC / 176 ~ 264VAC, 248 ~ 370VDC by switch	85 ~ 264VAC / 120 ~ 370VDC
	Frequency Range	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
	Efficiency (Typ.)	85%	84%	80%
Protection	Overload	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed
	Over Voltage	54 ~ 60V Protection type : Shut down o/p voltage, re-power on to recover	29 ~ 33V Protection type : Shut down o/p voltage, re-power on to recover	27.6 ~ 32.4V Protection type : Shut off o/p voltage, clamping by zener diode
Alarm Relay	DC OK Relay			
Indicator	LED	Power On	Power On	Power On
Housing	Dimension	100 x 125.5 x 125.2 mm (D x W x H)	100 x 65.5 x 125.2mm (D x W x H)	67 x 78 x 93 mm (D x W x H)
	Installation Mounting	DIN Rail	DIN Rail	DIN Rail
Environment	Working Temp	-10 ~ 70°C	-10 ~ 60°C	-10 ~ 50°C
	Working Humidity	20 ~ 90% RH non-condensing	20 ~ 90% RH non-condensing	20 ~ 90% RH non-condensing
	Storage Temp., Humidity	-20 ~ 85°C , 10 ~ 95% RH	-20 ~ 85°C , 10 ~ 95% RH	-20 ~ 85°C , 10 ~ 95% RH
	Vibration	Compliance to IEC60068-2-6	Compliance to IEC60068-2-6	Compliance to IEC60068-2-6
Safety & EMC	Safety Standards	UL508, UL60950-1 approved	UL508, UL60950-1 approved	UL508 approved
	EMC Emission	Compliance to EN55011, EN55022 (CISPR22), EN61204-3 Class B, EN61000-3-2, -3	Compliance to EN55011, EN55022 (CISPR22) Class B, EN61000-3-2,-3	Compliance to EN55011, EN55022 (CISPR22) Class B, EN61000-3-2,-3
	EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2 heavy industry level, criteria A	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A
Others	PFC	Built in Active PFC		
	MTBF	289.9K hrs min. MIL-HDBK-217F (25°C)	136.8Khrs min. MIL-HDBK-217F (25°C)	364.6K hrs min. MIL-HDBK-217F (25°C)
	Waranty	3 Years	3 Years	3 Years

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

## Specifications

Model Name		MDR-40-24	MDR-60-24
Output	Dc Voltage	24V	24V
	Rated Current	1.7A	2.5A
	Current Range	0 ~ 1.7A	0~2.5A
	Rated Power	40.8W	60W
	Output Voltage Adj. Range	24 ~ 30V	24~30V
Input	Voltage Range	85 ~ 264VAC / 120 ~ 370VDC	85 ~ 264VAC / 120 ~ 370VDC
	Frequency Range	47 ~ 63Hz	47 ~ 63Hz
	Efficiency (Typ.)	88%	88%
Protection	Overload	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed
	Over Voltage	31.2 ~ 36V Protection type : Shut down o/p voltage, re-power on to recover	31.2 ~ 36V Protection type : Shut down o/p voltage, re-power on to recover
Alarm Relay	DC OK Relay	DC OK Relay will Close In Normal Relay contact rating(max.) : 30V/1A resistive	DC OK Relay will Close Relay contact rating(max.): 30V/1A resistive
Indicator	LED	DC OK	Power On
Housing	Dimension	100 x 40 x 90 mm (D x W x H)	100 x 40 x 90 mm (D x W x H)
	Installation Mounting	DIN Rail	DIN Rail
Environment	Working Temp	-20 ~ 70°C	-20 ~ 70°C
	Working Humidity	20 ~ 90% RH non-condensing	20 ~ 90% RH non-condensing
	Storage Temp., Humidity	-40 ~ 85°C , 10 ~ 95% RH	-40 ~ 85°C , 10 ~ 95% RH
	Vibration	Compliance to IEC60068-2-6	Compliance to IEC60068-2-6
Safety & EMC	Safety Standards	UL508, UL60950-1 approved	UL508, UL60950-1 approved
	EMC Emission	Compliance to EN55011, EN55022 (CISPR22), EN61204-3 Class B, EN61000-3-2,-3	Compliance to EN55011, EN55022 (CISPR22), EN61204-3 Class B, EN61000-3-2, -3
	EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A
Others	PFC		
	MTBF	301.7K hrs min. MIL-HDBK-217F (25°C)	299.2K hrs min. MIL-HDBK-217F (25°C)
	Waranty	3 Years	3 Years

## Ordering Information

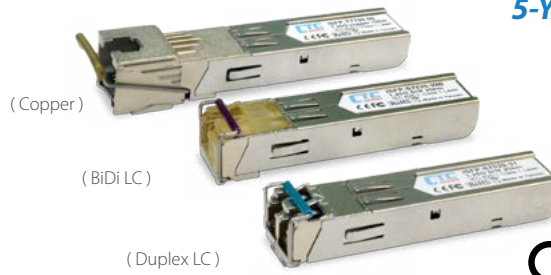
Model Name	Description
DR-120-24	Industrial Power, Input 88 ~ 132VAC / 176 ~ 264VAC, Output 24VDC, 120W, -10 ~ +60°C
DR-4524	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 48W, -10 ~ +50°C
MDR-40-24	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 40W, -20 ~ +70°C
MDR-60-24	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 60W, -20 ~ +70°C
DRP-240-48	Industrial Power, Input 85 ~ 264VAC, Output 48VDC, 240W, -10 ~ +70°C

DR - □□□□ - □□  
Example: DR - 120 - 24

# Industrial SFP Transceiver

1.25G 1000Base-X  
1.25G 1000Base-T  
155Mbps 100Base-FX

5-Year Warranty



10 Industrial SFP Transceiver

CTC 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's industrial SFP transceivers ensure your networks operate with maximum reliability, performance, and flexibility.

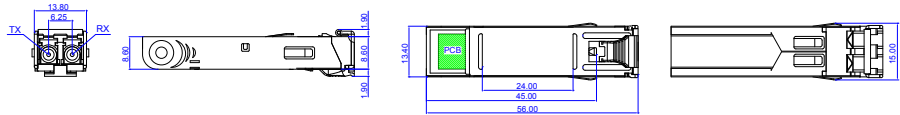
## Features

- All SFPs have been tested with the best operating performance on CTC 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
- Warranty 5 years

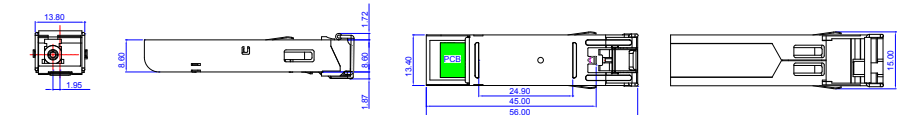
## Gigabit Ethernet SFP



Gigabit Duplex LC



Gigabit BiDi LC



## 1.25G 1000Base-X

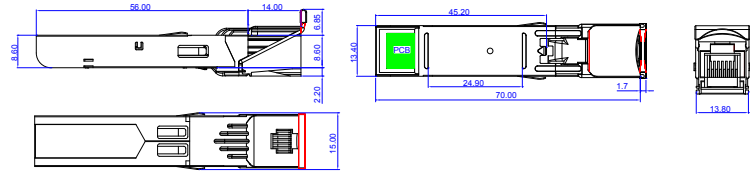
Model Name	Cable Type	Typical Distance	Wavelength (nm)	TX (dBm) (Min~Max)	RX Sensitivity (dBm)	Power Budget (dB)	Saturation (dBm)	Operating Temperature
ISFP-M7000-85	MM	550m	850	-9.5~-4	-17	7.5	-3	-10~70°C
ISFP-M7002-31	MM	2km	1310	-9~-1	-19	10	-1	-10~70°C
ISFP-S7020-31	SM	20km	1310	-8~-2	-23	15	-1	-10~70°C
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

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### Gigabit Ethernet SFP



Gigabit Copper



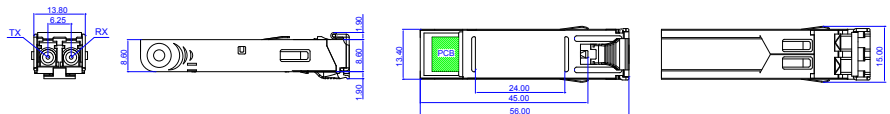
#### 1.25G 1000Base-T

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	---	---	---	---	---	0~70°C
ISFP-T7T00-00-E	Copper	100m	---	---	---	---	---	-40~85°C

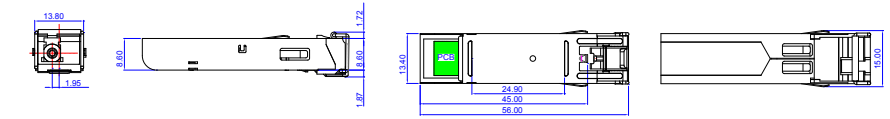
### Fast Ethernet SFP



Duplex LC



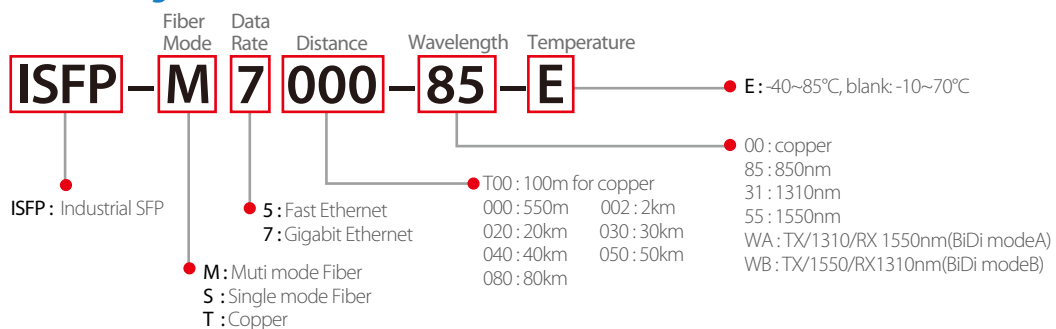
BiDi LC



#### 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

