

Industrial Multi-Channel RS-232/422/485 Serial to Fiber Converters

Features

- ▶ Fan-less and Din-Rail design for Harsh Industrial Environment
- ▶ Built in Bi-Directional RS232/422/485(Terminal Block) Serial Port
- ▶ Supports Multi-Channel Serial Data Ports: 4~16Ch RS232, 4~16Ch RS485 or 2~8Ch RS422
- ▶ Serial data is fully transparent, baud rate is self-adaptive, no setting is required
- ▶ Supports SFP, FC, SC or ST Multi-mode 2Km, Single-mode 20Km
- ▶ The high-speed serial data can be used for DMX512 communication in Stage Lighting Control
- ▶ Supports Input Voltage 12 ~ 48VDC
- ▶ Supports Reverse Polarity Protection
- ▶ IP40 Aluminum Case
- ▶ -40°C to 80°C (-40°F to 176°F) Operating Temperature
- ▶ 5-Year Warranty

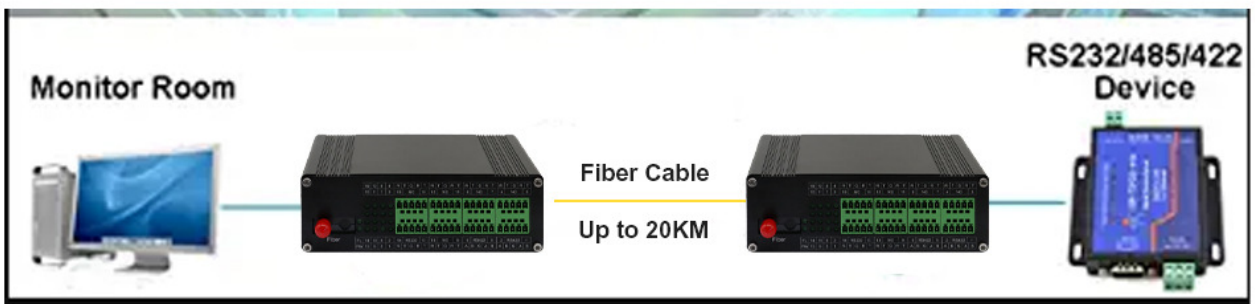


Overview

E-link LNK-IRS series is an industrial grade Multi-Channel RS232/RS485/RS422 to fiber optic converter which converts a standard RS232/RS485/RS422 signal to a fiber optic link as to extend the signal up to 2KM on multimode fiber and 20KM on single mode fiber. It supports Multi-Channel Serial Data Ports: 4~16Ch RS232, 4~16Ch RS485 or 2~8Ch RS422. Also it can be configured with mixed signals, such as 8Ch RS232 + 8Ch RS485, 8Ch RS232 + 4Ch RS422, 8Ch RS485 + 4Ch RS422, etc. It features a Din-Rail Type design to give users an easy installation and maintenance purpose in any harsh industrial environments.

The use of optical fiber communication solves the problems of electromagnetic interference, ground ring interference and lightning damage. It greatly improves the reliability, security, and confidentiality of data communication, and can be widely used in various industrial control, process control, Stage Lighting Control, and traffic control occasions.

Application





Technical Indexes

Fiber Optical Interface	
Fiber interface	SFP, FC, SC or ST
Cable requirement	Multi-Mode: 50/125um, 62.5/125um Single-Mode: 9/125um
Fiber port	1 Fiber Port
Transmission distance	Multi-Mode: 2km Single-Mode: 20km
Wavelength	1310nm/1490nm/1550nm
RS232 Serial Interface	
Physical interface	Industrial standard screw terminal
Data type	Up to 16Ch RS232 Bi-Direction
RS-232 signals	TxD, RxD, GND
Serial port line distance (copper)	15 meters

Baud Rate	0 ~ 800kbps
RS422 Serial Interface	
Physical interface	Industrial standard screw terminal
Data type	Up to 8Ch RS422 Bi-Direction
RS-422 signals	Tx+, Tx-, Rx+, Rx-, GND
Serial port line distance (copper)	1000 meters
Baud Rate	0 ~ 800kbps
RS485 Serial Interface	
Physical interface	Industrial standard screw terminal
Data type	Up to 16Ch RS485 Bi-Direction
RS-485 signals	Data+, Data-, GND
Serial port line distance (copper)	1000 meters
Baud rate	0 ~ 800kbps
Power Requirements	
Power input	12~48VDC
Power consumption	<6W
Power connector	Terminal block
Power protection	Reverse polarity protection
LED Indicator	
PWR	Power Supply
FL	Fiber Link Status
Data 1~16	Serial Data Signal
Mechanical	
Dimensions (LxWxH)	119 x 114 x 50mm
Weight	0.55KG
Casing	Aluminum Case
Mounting Options	DIN-Rail Mount
Environmental	
Working Temperature	-40°C to 80°C (-40°F to 176°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Working Humidity	5%~95% (Non-Condensing)
MTBF	216,388 Hours
Regulatory Approvals	
EMI	FCC Part15, CISPR (EN55022) Class A
EMS	EN61000-4-2 (ESD) Level 4, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (EFT) Level 3, Criteria A EN61000-4-5 (Surge) Level 3, Criteria B EN61000-4-6 (CS) Level 3, Criteria A
Shock / Freefall / Vibration	Shock: MIL-STD-810F Method 516.5 Free Fall: MIL-STD-810F Method 516.5 Vibration: MIL-STD-810F Method 514.5 C-1 & C-2
Green	RoHS Compliant
Certifications:	FCC, CE

Data Channel Rate Table

Data Channel	Measured error-free baud rate (bps)	Maximum supported baud rate (Kbps)	Typical application
1	460800	800	Stage lighting control system DMX512-500Kbps, security monitoring, fire alarm, industrial control, etc.
2	460800	800	Stage lighting control system DMX512-500Kbps, security monitoring, fire alarm, industrial control, etc.
3	230400	250	Security monitoring, fire alarm, industrial control, etc.
4	230400	250	Security monitoring, fire alarm, industrial control, etc.
5	460800	800	Stage lighting control system DMX512-500Kbps, security monitoring, fire alarm, industrial control, etc.
6	460800	800	Stage lighting control system DMX512-500Kbps, security monitoring, fire alarm, industrial control, etc.
7	230400	250	Security monitoring, fire alarm, industrial control, etc.
8	230400	250	Security monitoring, fire alarm, industrial control, etc.
9	460800	500	Stage lighting control system DMX512-500Kbps, security monitoring, fire alarm, industrial control, etc.
10	460800	500	Stage lighting control system DMX512-500Kbps, security monitoring, fire alarm, industrial control, etc.
11	230400	250	Security monitoring, fire alarm, industrial control, etc.
12	230400	250	Security monitoring, fire alarm, industrial control, etc.
13	230400	250	Security monitoring, fire alarm, industrial control, etc.
14	230400	250	Security monitoring, fire alarm, industrial control, etc.
15	230400	250	Security monitoring, fire alarm, industrial control, etc.
16	230400	250	Security monitoring, fire alarm, industrial control, etc.

Ordering Information

Industrial 4Ch RS232/485 or 2Ch RS422 Serial to Fiber Converter

Model	Description
LNK-IRS232-C04-SFP	Industrial 4Ch RS-232 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS232-C04	Industrial 4Ch RS-232 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS232-C04-20	Industrial 4Ch RS-232 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS232-C04-S20A	Industrial 4Ch RS-232 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS232-C04-S20B	Industrial 4Ch RS-232 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C04-SFP	Industrial 4Ch RS-485 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS485-C04	Industrial 4Ch RS-485 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS485-C04-20	Industrial 4Ch RS-485 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C04-S20A	Industrial 4Ch RS-485 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C04-S20B	Industrial 4Ch RS-485 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C02-SFP	Industrial 2Ch RS-422 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS422-C02	Industrial 2Ch RS-422 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS422-C02-20	Industrial 2Ch RS-422 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C02-S20A	Industrial 2Ch RS-422 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C02-S20B	Industrial 2Ch RS-422 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
Mounting Options	► Default DIN-Rail Bracket installed
Power Options	► DIN-Rail Power Supply. Open Wire for Terminal Block
	► Power Supply needs to be purchased separately

Notes:

1. FC, ST fiber port can be customized;
2. Can be configured with mixed signals, such as 2Ch RS232 + 2Ch RS485, 2Ch RS232 + 1Ch RS422, 2Ch RS485 + 1Ch RS422, etc

Industrial 8Ch RS232/485 or 4Ch RS422 Serial to Fiber Converter

Model	Description
LNK-IRS232-C08-SFP	Industrial 8Ch RS-232 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS232-C08	Industrial 8Ch RS-232 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS232-C08-20	Industrial 8Ch RS-232 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS232-C08-S20A	Industrial 8Ch RS-232 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS232-C08-S20B	Industrial 8Ch RS-232 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C08-SFP	Industrial 8Ch RS-485 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS485-C08	Industrial 8Ch RS-485 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS485-C08-20	Industrial 8Ch RS-485 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C08-S20A	Industrial 8Ch RS-485 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C08-S20B	Industrial 8Ch RS-485 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C04-SFP	Industrial 4Ch RS-422 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS422-C04	Industrial 4Ch RS-422 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS422-C04-20	Industrial 4Ch RS-422 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C04-S20A	Industrial 4Ch RS-422 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C04-S20B	Industrial 4Ch RS-422 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
Mounting Options	▶ Default DIN-Rail Bracket installed
Power Options	▶ DIN-Rail Power Supply. Open Wire for Terminal Block
	▶ Power Supply needs to be purchased separately

Notes:

1. FC, ST fiber port can be customized;
2. Can be configured with mixed signals, such as 4Ch RS232 + 4Ch RS485, 4Ch RS232 + 2Ch RS422, 4Ch RS485 + 2Ch RS422, etc

Industrial 12Ch RS232/485 or 6Ch RS422 Serial to Fiber Converter

Model	Description
LNK-IRS232-C12-SFP	Industrial 12Ch RS-232 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS232-C12	Industrial 12Ch RS-232 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS232-C12-20	Industrial 12Ch RS-232 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS232-C12-S20A	Industrial 12Ch RS-232 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS232-C12-S20B	Industrial 12Ch RS-232 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C12-SFP	Industrial 12Ch RS-485 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS485-C12	Industrial 12Ch RS-485 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS485-C12-20	Industrial 12Ch RS-485 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C12-S20A	Industrial 12Ch RS-485 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C12-S20B	Industrial 12Ch RS-485 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C06-SFP	Industrial 6Ch RS-422 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS422-C06	Industrial 6Ch RS-422 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS422-C06-20	Industrial 6Ch RS-422 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C06-S20A	Industrial 6Ch RS-422 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C06-S20B	Industrial 6Ch RS-422 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
Mounting Options	► Default DIN-Rail Bracket installed
Power Options	► DIN-Rail Power Supply. Open Wire for Terminal Block
	► Power Supply needs to be purchased separately

Notes:

1. FC, ST fiber port can be customized;
2. Can be configured with mixed signals, such as 6Ch RS232 + 6Ch RS485, 6Ch RS232 + 3Ch RS422, 6Ch RS485 + 3Ch RS422, etc

Industrial 16Ch RS232/485 or 8Ch RS422 Serial to Fiber Converter

Model	Description
LNK-IRS232-C16-SFP	Industrial 16Ch RS-232 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS232-C16	Industrial 16Ch RS-232 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS232-C16-20	Industrial 16Ch RS-232 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS232-C16-S20A	Industrial 16Ch RS-232 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS232-C16-S20B	Industrial 16Ch RS-232 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C16-SFP	Industrial 16Ch RS-485 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS485-C16	Industrial 16Ch RS-485 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS485-C16-20	Industrial 16Ch RS-485 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C16-S20A	Industrial 16Ch RS-485 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS485-C16-S20B	Industrial 16Ch RS-485 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C08-SFP	Industrial 8Ch RS-422 Serial to Fiber Converter, SFP Port (not including SFP modules), -40°C ~ 80°C
LNK-IRS422-C08	Industrial 8Ch RS-422 Serial to Fiber Converter, Multi-Mode, 1310nm, Dual Fiber, 2KM, SC, -40°C ~ 80°C
LNK-IRS422-C08-20	Industrial 8Ch RS-422 Serial to Fiber Converter, Single-Mode, 1310nm, Dual Fiber, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C08-S20A	Industrial 8Ch RS-422 Serial to Fiber Converter, Single-Mode, Single Fiber, 1310nm Tx/1550nm RX, 20KM, SC, -40°C ~ 80°C
LNK-IRS422-C08-S20B	Industrial 8Ch RS-422 Serial to Fiber Converter, Single-Mode, Single Fiber, 1550nm Tx/1310nm RX, 20KM, SC, -40°C ~ 80°C
Mounting Options	► Default DIN-Rail Bracket installed
Power Options	► DIN-Rail Power Supply. Open Wire for Terminal Block
	► Power Supply needs to be purchased separately

Notes:

1. FC, ST fiber port can be customized;
2. Can be configured with mixed signals, such as 8Ch RS232 + 8Ch RS485, 8Ch RS232 + 4Ch RS422, 8Ch RS485 + 4Ch RS422, etc