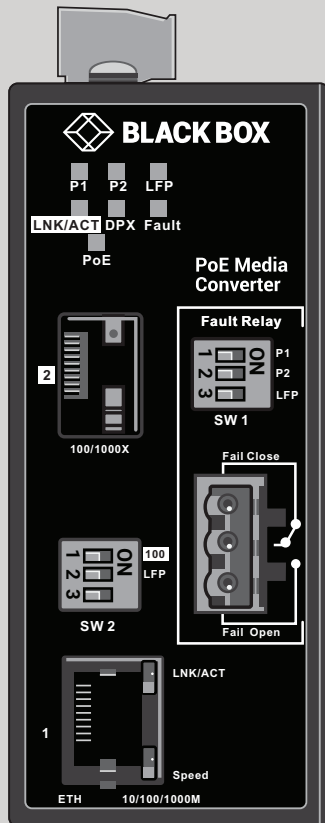LGC5500A

INDUSTRIAL GB POE MEDIA CONVERTER

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM

OVERVIEW

INDUSTRIAL GIGABIT POE MEDIA CONVERTER DATA SHEET

INTRODUCTION

The Industrial Gigabit PoE Media Converter (LGC5500A) is a cost-effective solution for conversion between 10/100/1000BASE-T(X) and 100/1000BASE-X SFP interfaces, allowing you to extend communication distance using optical fiber. The device supports MDI/MDIX auto detection, so you don't need to use crossover wires. With a 10/100/1000BASE-T(X) P.S.E. (Power Sourcing Equipment) port, the device can transmit electrical power up to 30 watts, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. It also supports LFP (Link Fault Pass-through). When one side of the link fails, the other side continues to transmit packets and will wait for a response that never arrives from the disconnected side. LFP can be easily enabled using the DIP switch. Once enabled, the link will shut down as soon as it is notified that the other link has failed, giving the application software a chance to react to the situation.

The LGC5500A has a wide operating temperature range from -40 to +167° F (-40 to +75° C) and a wide voltage range between 50 to 57 VDC, so it is suitable for harsh operating environments.

FEATURES

- **SUPPORTS ONE 10/100/1000BASE-T(X) P.S.E. AUTO-NEGOTIATION AND AUTO-MDI/MDI-X COPPER PORT**
- **HAS ONE 100/1000BASE-X SFP FIBER PORT**
- **P.S.E. COMPLIES WITH IEEE802.3AT STANDARD, AND PROVIDES UP TO 30 WATTS**
- **SUPPORTS JUMBO FRAME UP TO 9K BYTES**
- **INCLUDES LFP (LINK FAULT PASS-THROUGH) FUNCTION**
- **RELAY OUTPUT CAN CARRY CAPACITY OF 1A AT 24 VDC FOR WARNING SYSTEM**
- **RIGID IP-30 HOUSING DESIGN**
- **MOUNTS ON A DIN RAIL OR WALL**

PHOTOS

INDUSTRIAL GIGABIT POE MEDIA CONVERTER (LGC5500A)

FRONT VIEW

BACK VIEW

TOP VIEW

LGC5500A

LGC5500A

LGC5500A

SPECIFICATIONS

INDUSTRIAL GIGABIT POE MEDIA CONVERTER (LGC5500A)
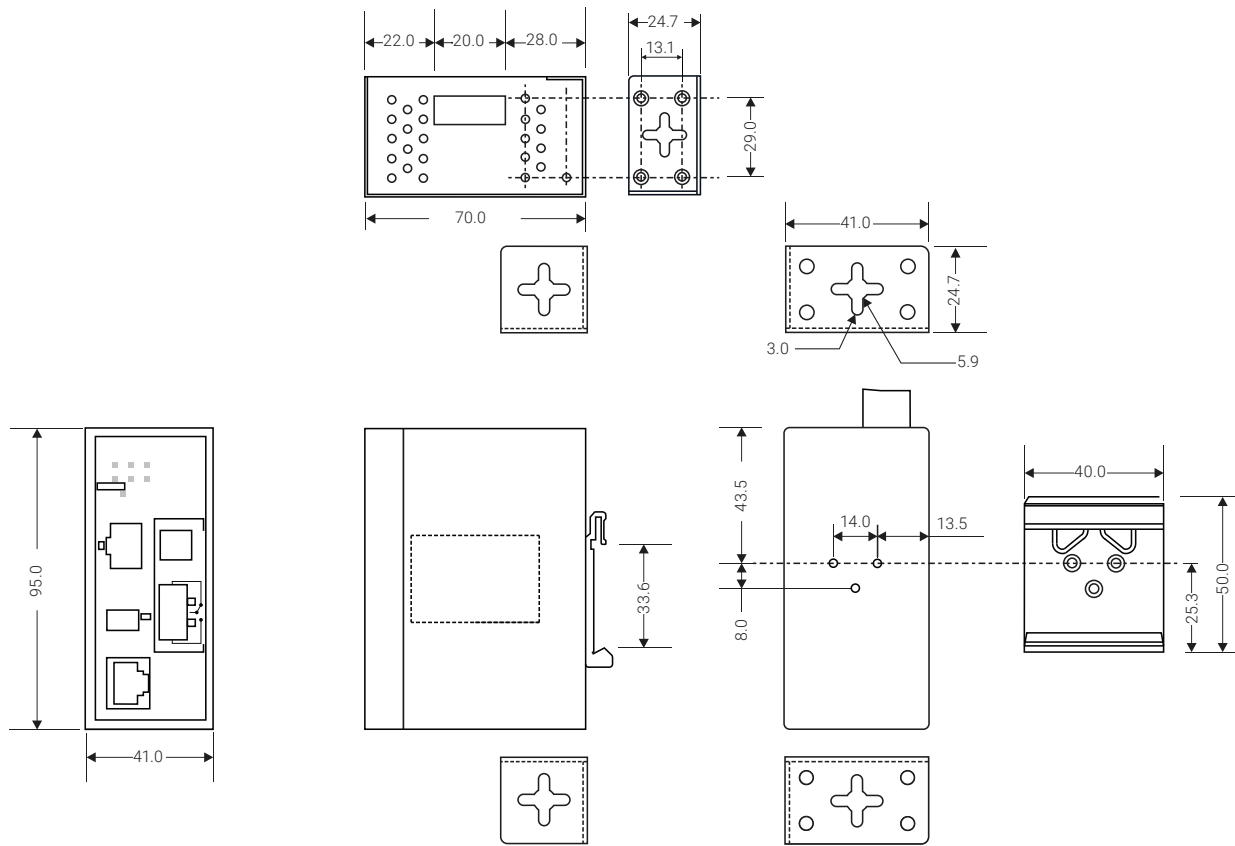
WHAT'S INCLUDED WITH THE LGC5500A

- **(1) INDUSTRIAL GIGABIT POE MEDIA CONVERTER**
- **(1) DIN RAIL KIT**
- **(1) WALLMOUNT KIT**
- **(1) 4-PIN TERMINAL BLOCK**

INDUSTRIAL GIGABIT POE MEDIA CONVERTER (LGC5500A) SPECIFICATIONS	
PHYSICAL PORTS	
10/100/1000BASE-T(X) PORT	(1) RJ-45
100/1000BASE-X PORT	(1) SFP cage
TECHNOLOGY	
ETHERNET STANDARDS	IEEE 802.3i for 10BASE-T; IEEE 802.3u for 100BASE-TX and 100BASEFX; IEEE 802.3ab for 1000BASE-T; IEEE 802.3z for 1000BASE-X; IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.)
JUMBO FRAME	9K Bytes (1G mode only)
MTBF	1,116,093 hours
FAULT CONTACT	
RELAY	Relay output to carry capacity of 1 A at 24 VDC at pin terminal block
POWER	
INPUT POWER	Dual 50 to 57 VDC voltage power inputs in 4-pin terminal block
POWER CONSUMPTION (TYP.)	4 Watts (unit only, does not include PoE)
OVERLOAD CURRENT PROTECTION	Present
REVERSE POLARITY PROTECTION	Present on terminal block
PHYSICAL	
ENCLOSURE	IP-30
DIMENSIONS	3.74" H x 1.61" W x 2.76" D (9.5 x 4.1 x 7 cm)
WEIGHT	0.64 lb. (291 g)
ENVIRONMENTAL	
STORAGE TEMPERATURE	-40 to +185° F (-40 to +85° C)
OPERATING TEMPERATURE	-40 to +167° F (-40 to +75° C)
OPERATING HUMIDITY	5 to 95%, noncondensing
REGULATORY APPROVALS	
EMI	FCC Part 15, CISPR (EN55022) Class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EMS EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
SHOCK	IEC60068-2-27
FREE FALL	IEC60068-2-32
VIBRATION	IEC60068-2-6
SAFETY	EN60950-1

SPECIFICATIONS

INDUSTRIAL GIGABIT POE MEDIA CONVERTER (LGC5500A) DIMENSIONAL DIAGRAM

NOTE: Dimensions are in millimeters (mm).

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APPLICATION DIAGRAM

INDUSTRIAL GIGABIT POE MEDIA CONVERTER (LGC5500A)

ORDERING INFORMATION

ITEM	CODE
Industrial Gigabit PoE Media Converter	**LGC5500A**
Compatible SFPs	
SFP - 155-Mbps, Extended Diagnostics, 850-nm Multimode Fiber, 2-km, LC	**LFP401**
SFP - 155-Mbps, Extended Diagnostics, 1310-nm Multimode Fiber, 2-km, LC	**LFP402**
SFP - 155-Mbps, Extended Diagnostics, 1310-nm Single-Mode Fiber, 30-km, LC	**LFP403**
SFP - 155-Mbps, Extended Diagnostics, 1310-nm Single-Mode Fiber, 60-km, LC	**LFP404**
SFP - 1250-Mbps, Extended Diagnostics, 850-nm Multimode Fiber, 550-m, LC	**LFP411**
SFP - 1250-Mbps, Extended Diagnostics, 1310-nm Multimode Fiber, 2-km, LC	**LFP412**
SFP - 1250-Mbps, Extended Diagnostics, 1310-nm Single-Mode Fiber, 10-km, LC	**LFP413**
SFP - 1250-Mbps, Extended Diagnostics, 1310-nm Single-Mode Fiber, 30-km, LC	**LFP414**
SFP - 1250-Mbps, Extended Diagnostics, 10/100/1000BASE-T, SGMII Interface, RJ-45	**LFP416**
SFP - 1250-Mbps, Extended Diagnostics, 1550-nm Single-Mode Fiber, 80-km, LC	**LFP418**
SFP - 1250-Mbps, Extended Diagnostics, 1550-nm TX, 1310-nm RX, Simplex, Single-Mode Fiber, 10-km, LC	**LFP420**
SFP - 1250-Mbps, Extended Diagnostics, 1310-nm TX, 1550-nm RX, Simplex Single-Mode Fiber, 10-km, LC	**LFP421**

NOTES _____

ABOUT BLACK BOX

Black Box is a world leading technology solutions provider specializing in complete high-performance KVM, professional A/V signal distribution and extension and switching solutions for mission-critical applications. Black Box is dedicated to delivering superior project engineering, technical support, and 24/7 customer service you can rely on for your most critical operations.

Every day, our customers trust us to design, integrate, and maintain reliable control room solutions for broadcasting, post-production, stadiums & arenas, medical, air traffic control, oil & gas, government & military, and utility industries. Leave the tech to us and our comprehensive technology solutions will deliver secure connections, fast-response times, real-time collaboration and more.

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