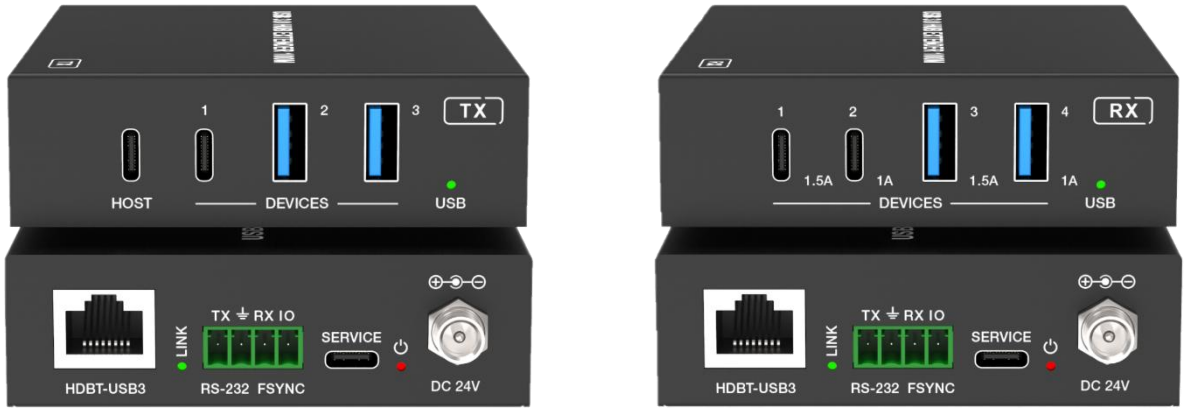
USB 3.0 EXTENDER

USB 3.2 Gen 1, 5Gbps, USB Type-C Host Port, Local USB Device Ports, RS-232, FSYNC, PoC, 100m

Model: DSG-USB-EU302



The USB 3.2 Gen 1 Extender enables high-speed USB signal extension up to 100 meters (328 feet) over a single CAT6a cable. The Transmitter features one USB-C host port, one USB-C device port, and two USB-A device ports. The Receiver provides two USB-C and two USB-A device ports.

Bi-directional 24V PoC (Power over Cable) allows power to be supplied from either the Transmitter or Receiver - only one side requires external power.

Ideal for extending connections to USB devices such as webcams, PTZ cameras, keyboards, mice, USB microphones, flash drives, printers, scanners, and touch displays.

- ☆ Extends USB 3.2 Gen 1 (USB 3.0) signals up to 100m (328ft) over CAT6a cable
- ☆ USB 3.2 Gen 1 (USB 3.0) data rate up to 5Gbps
- ☆ Backward compatible with USB 2.0 and 1.1
- ☆ Supports isochronous and bulk transfers hardware acceleration
- ☆ Transmitter (TX):
  - 1 x USB-C host port
  - 1 x USB-C device port (1 x 5V@1A)
  - 2 x USB-A device ports (2 x 5V@1A)
- ☆ Receiver (RX):
  - 2 x USB-C device ports (1 x 5V@1A, 1 x 5V@1.5A)
  - 2 x USB-A device ports (1 x 5V@1A, 1 x 5V@1.5A)

USB 3.0 EXTENDER

- ☆ Firmware upgrade via USB-C service port
- ☆ Supports RS-232 pass-through and FSYNC GPIO pass-through support (for industrial cameras)
- ☆ Bi-directional 24V PoC (Power over Cable) – Power required at only one end (TX or RX)
- ☆ Plug-and-play; no drivers and software required

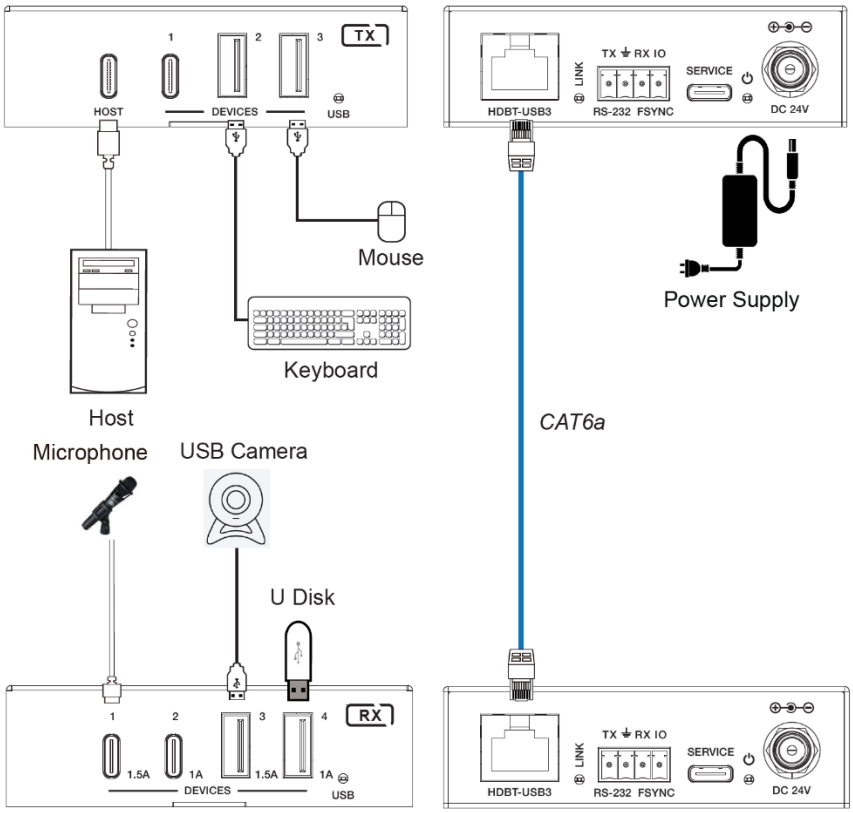
SPECIFICATIONS

Technical	
USB Protocol	USB 3.2 Gen 1 (USB 3.0)
Transmission Rate	Up to 5Gbps
Transmission Distance	100m/328ft over CAT6a (F/FTP) cable 1.5m/4.9ft via USB 3.0 cable between host and TX
ESD Protection	IEC 61000-42: ±8kV (air-gap discharge) and ±4kV (contact discharge)
Connections	
Transmitter	Input and Output: • 1 × USB HOST [USB Type C, 24-pin Female] • 1 × USB-C DEVICE [USB Type C, 24-pin Female] • 2 × USB-A DEVICE [USB Type A, 9-pin Female] Control: • 1 × RS-232 [3-pin – 3.5mm Phoenix Connector] • 1 × FSYNC [1-pin – 3.5mm Phoenix Connector] • 1 × SERVICE [USB Type C, Firmware Update Port] Network: • 1 × HDBT-USB3 [RJ-45, Female, 24V PoC]
Receiver	Input and Output: • 2 × USB-A Device [USB Type A, 9-pin Female] • 2 × USB-C Device [USB Type C, 24-pin Female] Control: • 1 × RS-232 [3-pin – 3.5mm Phoenix Connector] • 1 × FSYNC [1-pin – 3.5mm Phoenix Connector] • 1 × SERVICE [USB Type C, Firmware Update Port] Network: • 1 × HDBT-USB3 [RJ-45, Female, 24V PoC]

USB 3.0 EXTENDER

Mechanical and Environmental	
Housing	Metal Enclosure
Colour	Black
Dimensions	Transmitter / Receiver: 100mm [W] × 85mm [D] × 25.5mm [H]
Weight	Transmitter: 265g Receiver: 275g
Power Supply	Input: AC 100 ~ 240V 50/60Hz Output: DC 24V/2A
Power Consumption	TX: 23W (Max); RX: 35W (Max); TX+RX: 68W (Max, including line loss)
Operating Temperature	0°C to 40°C / 32°F to 104°F
Storage Temperature	-20°C to 60°C / -4°F to 140°F
Operating Humidity	20 to 80% RH (non-condensing)
Storage Humidity	10 to 90% RH (non-condensing)

CONNECTION DIAGRAM



USB 3.0 EXTENDER

PACKAGE CONTENTS

① 1 × USB 3.2 Gen 1 Extender (Transmitter)
② 1 × USB 3.2 Gen 1 Extender (Receiver)
③ 1 × 24V/3.75A Locking Power Supply
④ 2 × 4 pin-3.5mm Phoenix Connector (Male)
⑤ 4 × Mounting Ear
⑥ 8 × Machine Screw (KM3*4)
⑦ 1 × User Manual

WARRANTY

- Standard 1-Year Limited Warranty, unless otherwise specified by Sales.
- Optional Advance Replacement Warranty is available upon request

ORDERING INFORMATION

Part Number	Descriptions
DSG-USB-EU302	USB 3.0 Extender over CATx 100 meters with USB Type-C Host Port and Local USB Device Ports

CONTACT INFORMATION

For more information, please visit our website or contact our customer service team:

- **Website:** www.dsgio.com
- **Email:** sales.apac@dsgio.com

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