**TechLogix Networx**

# Technical Specifications
# TL-FO2-HDC2

### Features at a Glance

- Transmit HDMI, IR & RS232 over two fiber optic conductors
- LC connectors for fiber connection
- Single & multimode fiber compatible
- Audio Return Channel (ARC)
- Extend 18G HDMI up to 300m (984 ft.)
- HDMI 2.0 & HDCP 2.2 compliant
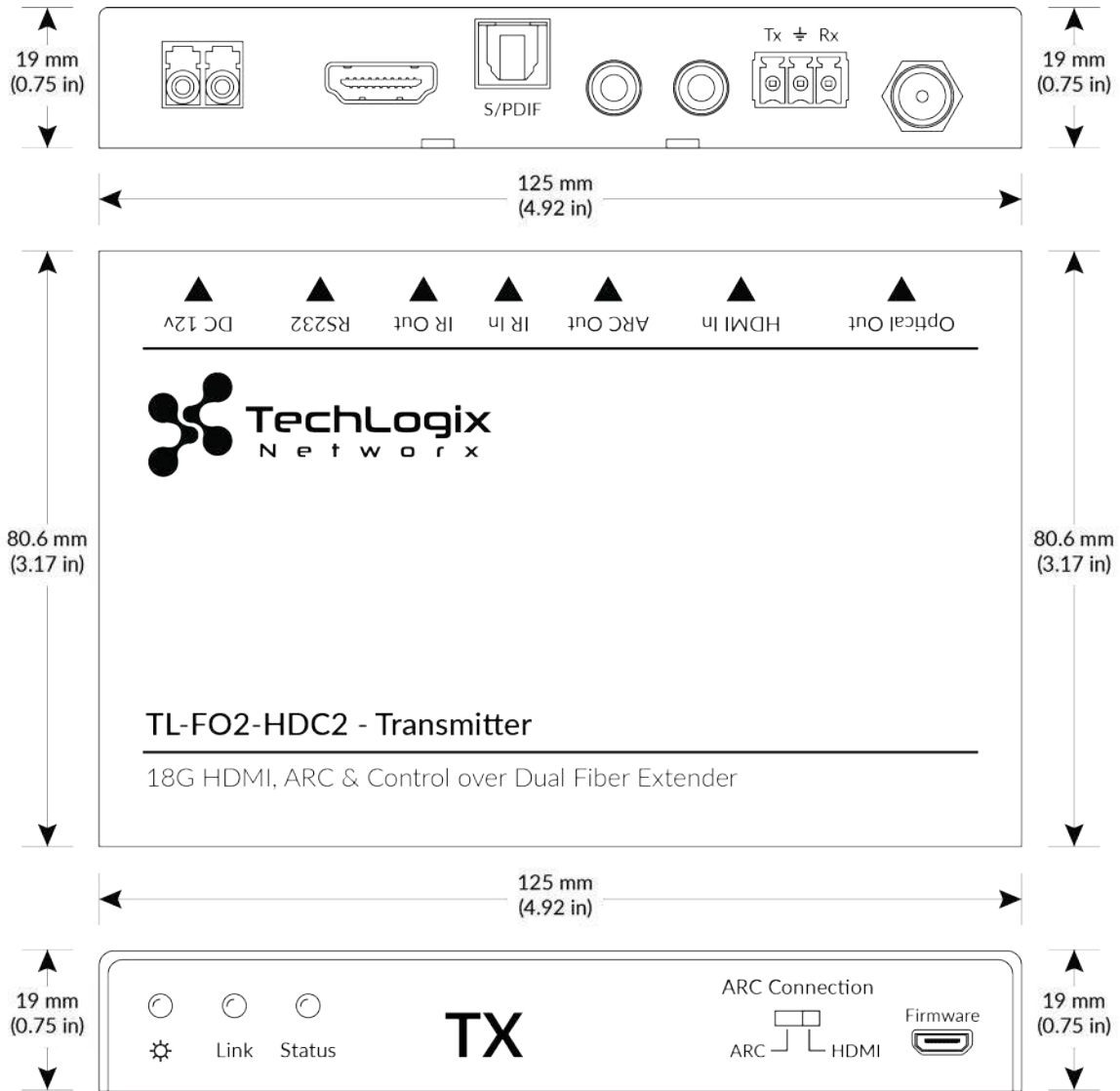- 4K@60 compliant
- Immune to RF & EM interference

The TL-FO2-HDC2 is an HDMI 2.0 (18G signal) with HDCP 2.2 support fiber optic extender that can reach up to 300 meters (984 ft) over a duplex OM3 or OS2 cable with common LC terminations. The unit supports HDMI video resolutions up to 4K@60, HDR video, IR or RS232 pass-through controls, multichannel audio, as well as ARC with optional optical audio embedding and/or de-embedding. The TL-FO2-HDC2 is also compatible with HDMI 1.3/1.4 content with HDCP 1.3/1.4 content protection.

The TL-FO2-HDC2 supports two ARC connection modes: HDMI and S/PDIF, which results in four options to pass audio from the display to the head end. When the receiver is set to HDMI, audio from the display will pass to the transmitter via the HDMI output port. When the receiver is set to S/PDIF, audio from the display will pass to the transmitter via the S/PDIF optical audio port. When the transmitter is set to HDMI, audio from the receiver will be provided on the HDMI input port. When the transmitter is set to S/PDIF, audio from the receiver will be provided on the S/PDIF optical audio port.

## Specifications

| Transmitter Input/Output | |
|---|---|
| HDMI Input | 1 HDMI Receptacle |
| Optical Output | 2 LC Ports |
| ARC Output | 1 Optical Audio Port |
| IR Input/Output | 2 3.5mm TRS Ports |
| RS232 | 1 3-pin Removable Terminal Block |
| 12V DC | 1 5.5mm OD/2.5mm ID Threaded Barrel Connector |
| ARC Audio Selector | 1 2-position Switch |
| **Receiver Input/Output** | |
| HDMI Output | 1 HDMI Receptacle |
| Optical Input | 2 LC Ports |
| ARC Input | 1 Optical Audio Port |
| IR Input/Output | 2 3.5mm TRS Ports |
| RS232 | 1 3-pin Removable Terminal Block |
| 12V DC | 1 5.5mm OD/2.5mm ID Threaded Barrel Connector |
| ARC Audio Selector | 1 2-position Switch |
| **Supported Audio, Video, and Control** | |
| Compatible Video Signals | All SD, HD, and other resolutions up to<br>- 4K/60 Hz / RGB and 4:4:4 8 bit (HDR)<br>- 4K/60 Hz / 4:2:2 10 bit (HDR)<br>- 4K/60 Hz / 4:2:0 10 bit (HDR) |
| Video Compliance | HDMI 2.0, HDMI 1.4, DVI 2.0 (Pixel clock up to 594 MHz) |
| Digital Content Protection | HDCP 1.2 / HDCP 2.2 Compatible |
| Embedded Audio | LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD |
| ARC (Audio Return Channel) | Up to 6-channel audio |
| Supported RS232 Baud Rates | 2400, 4800, 9600, 19200, 38400, 57600, 115200 |
| Supported IR Carrier | 33 to 55 kHz |
| **Fiber Optic Transmission Characteristics** | |
| Required Cable Type | Duplex OM3 or OS2 |
| Maximum Bandwidth | 35 Gbps |
| Maximum Distance | 300m (984 ft) |
| Signal Compression | None |
| **Chassis and Environmental** | |
| Product Construction | Painted aluminum |
| Product Dimensions (W*H*D) | 125 mm (4.92 in) x 19 mm (0.75 in) x 86 mm (3.17 in) |
| Product Operational Chassis Temperature | 35 to + 44°C (95 to + 111 °F) |
| Environmental Operating Temperature | 0 to + 45°C (32 to + 113 °F) |
| Environmental Operating Humidity | 10% to 90%, non-condensing |
| Environmental Storage Temperature | -20 to +70°C (-4 to + 158 °F) |
| Environmental Storage Humidity | 10% to 90%, non-condensing |
| **Power and Regulatory** | |
| Power Input | 12V DC |
| Power Supply Input | 100-240V AC at 50/60 Hz; 0.5A Max |
| Power Supply Output | 12V DC at 1 A |
| Maximum Power Consumption | 6 watts |
| ESD Protection | Human-body Model: ±8kV Air-gap discharge and ±4kV Contact discharge |
| Regulatory Compliance | FCC, CE, RoHS, WEEE |
| **Other** | |
| Warranty | Three years |
| Diagnostic LEDs | Link, Status, and Power |
| Included Accessories | IR Receiver (2 ea), IR Transmitter (2 ea), Mounting Ears (4 ea), Rubber Feet (8 ea), 12V 1A DC Power Supply (2 ea), 3-pin 3.5mm Terminal Block (2 ea), DE-9 to 3-pin RS232 Cable (2 ea) |

## Transmitter Dimensional Drawings

# Receiver Dimensional Drawings

19 mm
(0.75 in)

S/PDIF

Tx ⏚ Rx

19 mm
(0.75 in)

125 mm
(4.92 in)

DC 12v RS232 IR Out IR In ARC In HDMI Out Optical In

80.6 mm
(3.17 in)

80.6 mm
(3.17 in)

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## TL-FO2-HDC2 - Receiver

18G HDMI, ARC & Control over Dual Fiber Extender

125 mm
(4.92 in)

19 mm
(0.75 in)

☼ Link Status

**RX**

ARC Connection

ARC ⌐ HDMI

Firmware

19 mm
(0.75 in)