

## TRITEC<sup>®</sup> Etherface<sup>®</sup>-1 TX (10G)

Video signal converter and 10G fibre optic transmitter. Optically isolated input for MDM with looped signal output.

# **Key Features**

- SDI, DisplayPort or HDMI signal conversion to 10G optical Ethernet IEEE 803.2ae compatible packets
- 4K Resolution up to 4096x2160@60Hz
- 10GBASE-SR/-SW/-LR/-LW (SFP+) compatible
- Lossless transmission, no compression
- Zero latency ensures perfect hand / eye coordination
- Local signal loop through



- USB for HID Devices (e.g. Keyboard & Mouse) to control connected sources
- Remote monitoring of the Etherface-1 TX from MultiDisplayManager (MDM)
- Wall mount and table versions.
- Fanless design, no noise emission
- Electrical safety according to standard EN62368 and UL60601 (recognition mark component)



### **Specifications**

### **Input Specification**

	HDMI	Display Port	SDI	USB
Supported Standards	HDMI 2.0	Display Port 1.2	12G, 6G, 3G SDI HD, SMPTE 259M, 292M, 424M	USB 1.1 Connection to PC (HID)
Connector Type	HDMI	Display Port	BNC	1x USB-C
Input signal equalizer	yes	yes	yes	n/a
Loop Through output	yes, cable driver	yes, cable driver	yes, reclocked cable driver	n/a
max .pixel clock [MHz]	594	594	594	n/a
Max. Resolutions @60Hz	4096x2160	4096x2160	4096x2160	n/a
Color Formats	RGB, YPbPr, 4:4:4, 4:2:2	RGB, 4:4:4	YPbPr, 4:2:2	n/a
Color Depth [Bits]	8,10,12	8	10	n/a
Color converter		4096x2160x30Hz are color to YPbPr 4:2:2	no	n/a
Max Resolution visible on MDM via MDI-10 input board		4:4:4 mode higher resolutions 2:2 mode	up to 4096x2160x60Hz	n/a
Color Depth visible on MDM [Bits]		n/a		

### **Ethernet Specification**

Physical Interface	
Ethernet	10GBASE-SR/-SW/-LR/-LW IEEE 803.2ae compatible
SFP+ module	10G optical Interface (max. power consumption 1W) replaceable part
Max. Length of optical cable	SR Type of SFP+ module: 200m (included) LR Type of SFP+ module: 1km (optional)
Optical Cable Type	OM3 Multi Mode LC cable

## Sample Setup "Basic"



### **Technical Specifications**

Power Supply (Requirements)				
Power Input connector	USB-C			
Input Voltage [V]	5V DC +/- 5%			
Input Current	max. 3A@5VDC			
Electrical Safety & EMC Spe	cifications			
Electrical Safety	UL / IEC / EN 62368, UL60601 (recognition mark component)			
EMC	According to IEC CISPR 32 / EN 55032 + IEC / EN 61000-3-2 + IEC / EN 61000-3-3 (Emission), IEC CISPR 35 / EN 55035 (Immunity), tested with parameters based on 60601-1-2 (Professional Healthcare)			
Radiated Emissions	IEC CISPR 32 / EN 55032 Class B, FCC Class A (Radiated & Conducted emissions)			
Immunity	IEC / EN 61000-4-2:2009 (Electrostatic discharge; $\pm 4/8kV$ contact, $\pm 2/4/8/15kV$ air ) IEC / EN 61000-4-3:2006+A1:2008+A2:2010 (Radiated immunity; 3V/m: 80-2700, 1800, 2600, 3500, 5000MHz) IEC / EN 61000-4-2:2012 (EFT/Burst; AC mains $\pm 1kV$ 5kHz, $\pm 2kV$ 100kHz) IEC / EN 61000-4-5:2014 (Surges; AC mains: $\pm 1kV$ L-to-L, $\pm 2kV$ L-to-E) IEC / EN 61000-4-6:2014 (Conducted immunity; AC mains 3V, 6V: 0, 15-80MHz + ISM bands) IEC / EN 61000-4-8:2010 (Power frequency magnetic field; 30A/m) IEC / EN 61000-4-11:2004 (Voltage dips and interruptions; details on request)			
Markings	CE, UKCA, UL			

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Environmental Specifications				
Unpackaged Operating Temperature	5 °C to 35°C according EN 60068-2-1/2			
Unpackaged Operating Humidity	Damp heat, 25°C, 10 to 80% RH (non condensing) according EN 60068-2-38.			
Unpackaged Operating Pressure	700-1060 hPa (525 -795 mmHg) or up to 3000m (10,000ft).			
Packaged Non-Operating Temperature (Storage, Transportation)	-40 °C to +70 °C according EN 60068-2-1/2			
Packaged Non-Operating Humidity	+25°C 10 to 95% RH (non-condensing) according 60068-2-38.			
Packaged Non-Operating Pressure	500 -1060 hPa (375 -795 mmHg) or up to 5,050m (18,000 ft).			
Packaged Tests Continuous Shock	according EN 60068-2-29 and EN60721-3-2, class 2M2.			
Package Drop Test	according EN 24180-2.			
Sound Noise Level	No noise emitted.			
RoHS	Directive 2011/65/EU			
Reliability				
MTBF without/with power supply	87600h / 70000h			

Order Number	Optical Isolation	.Output Connector	Mechanical	Power Supply	Picture	Dimensions (w/h/d) Weight
Etherface-1-TX	Yes	Front SFP+ 10G Ethernet	Desk	External via USB C to front, Power Supply included		144mm/42mm/54mm 0.5 kg
Etherface-1-TX-S	Yes	Side SFP+ 10G Ethernet	Cable Duct; with optional Case as Wall Mount Option	DC Connector 5,5x2,1mm Locking S761K Power Supply included, IEC 320/C8, connector at the power supply		172mm/1606mm/58mm 0.7 kg



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#### **Worldwide Sales**

OEM, distribution and reseller requests are welcome. Please contact TRITEC for more information.



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