



# TR1101

## Single Channel Baseband Fiber Optic FM Transmitter

### Description

The TRANSPORT 1101-X-X-VDA2 fiber optic transmitter (Tx) provides capacity for one full motion video, multiple audio and a high speed data carrier on one fiber strand with baseband audio and video inputs.

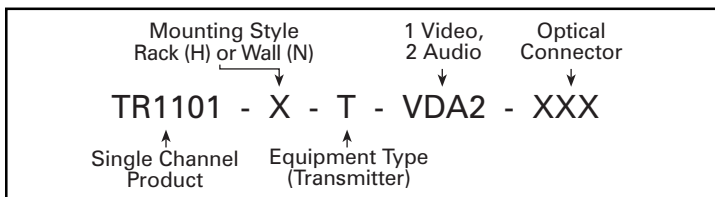
The TR1101-VDA2 transmitter supports broadcast quality full motion video performance over a 13 dB optical path loss (operating at 1310 nm). Each TR1101-VDA2 transmitter features an internal FM modulator which converts direct baseband video and audio inputs to IF carriers. The IF is converted to light for transport over single mode fiber at (1310nm) to a TR1101 Receiver (Rx) for distribution.

An Auxiliary RF port also accepts a "T" channel carrier from the appropriate external RF modem for transmission of fax signals, control data or high speed 10 Mbps data. The RF input is internally combined with the FM video/audio carrier and fed to a laser diode for simultaneous transmission on a dedicated single mode fiber.

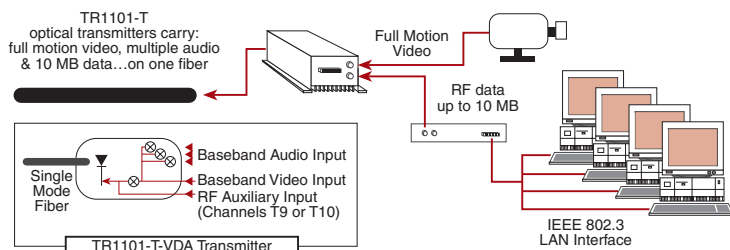
### Mounting Options

The TR1101-VDA2 is available in a rack (H-T-VDA2) style and a wall (N-T-VDA2) style. See operation parameters for dimensions.

### Ordering Model Information



### Integrated Single Channel Transmission



TR1101-N-T-VDA2 Wall Mount Tx

### General

<b>Video Connector:</b>	75 Ω BNC connector
<b>Audio Connector:</b>	600 Ω balanced terminal block
<b>RF Auxiliary Connector:</b>	75 Ω "F" type
<b>RF Return Loss, dB:</b>	16
<b>Video Bandwidth:</b>	20 Hz to 4.5 MHz
<b>Audio Bandwidth:</b>	20 Hz to 15 kHz
<b>RF Auxiliary Bandwidth:</b>	15 to 30 MHz, T9 or T10
<b>Video Input Level:</b>	1.0 Vpp typ
<b>Audio Input Level:</b>	1.0 Vrms typ
<b>RF Aux. Input Level:</b>	+24 dBmV Nominal
<b>Wavelength, nm:</b>	1310 +/-20
<b>Optical Connectors:</b>	FC, FC-APC, SC, SC-APC or ST

### Performance

<b>Optical path Loss:</b>	13 dB
<b>Video SNR, dB:</b>	60 min, 62 typ (NTSC weighting)
<b>Bar Amplitude:</b>	95 to 105 IRE
<b>Sync Amp. (%BAR):</b>	35 to 42
<b>Burst Amp. (%Sync):</b>	95 to 105
<b>Burst Amp. (%BAR):</b>	36 to 44
<b>Line Time Distortion, %:</b>	0 to 2
<b>Chrom.Luminous Gain:</b>	93 to 107
<b>Differential Phase:</b>	2.5° max
<b>Differential Gain:</b>	5% typ, 8% max
<b>Luminous Non-Linearity:</b>	4% typ, 8% max
<b>Audio SNR, dB:</b>	45 min, 52 typ (unweighted)
<b>T.H.D @ 1.2 kHz:</b>	0.5% max

### Operation Parameters

#### Dimension:

"N" Style brick	2.90" x 4.60" x 10.00"
"H" Style module	1.00" x 5.00" x 9.00"
"H" TR1101-UR rack	5.25" x 12.00" x 19.00"

#### Operating Temp.°C:

-10 to 50

#### Power Consumption:

15 Watts per unit

#### Power Source:

"N" Style brick	85 to 132 VAC, 47-400 Hz
"H" TR1101-UR rack	85 to 132 VAC, 47-400 Hz
	170 to 265 VAC, 47-400 Hz
	36 to 76 VDC

Note: Single mode fiber is required for operation of TR1101 Series equipment. Specifications are subject to change for product improvements. 5/00

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