

# Specifications — TP Series Transmitters

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## Video — video models

Number/signal type .....	1, 2, or 4 sets of proprietary analog signals
Connectors	
TP T 15HD 45 .....	(1) 8-pin spring force captive wire connector
All other models .....	1, 2, or 4 shielded RJ-45 female

## Video input — video models

Number/signal type	
TP T 460, TP T 15HD A, TP T 15HD 45	1 analog RGBHV, RGBS, RGsB, component video, or S-video; or 1 S-video and 1 NTSC/PAL/SECAM composite video from a single or genlocked source; or 3 NTSC/PAL composite video from a single source
TP T 15HD AV .....	1 analog RGBHV, RGBS, RGsB, component video, or S-video; or 1 S-video and 1 NTSC/PAL/SECAM composite video from a single or genlocked source; or 3 NTSC/PAL/SECAM composite video from a single source <i>and</i> 1 NTSC/PAL/SECAM composite video
TP T BNC, TP T BNC DA4	1 analog RGBHV, RGBS, RGsB, component video, or S-video; or 1 S-video and 1 NTSC/PAL/SECAM composite video from a single or genlocked source; or 3 NTSC/PAL/SECAM composite video from a single source
TP T AV .....	1 NTSC/PAL/SECAM composite video
Connectors	
TP T 15HD A, TP T 460, TP T 15HD 45	(1) 15-pin HD female (Mac and Sun/SGI to VGA adapters are available)
TP T 15HD AV .....	(1) 15-pin HD female (Mac and Sun/SGI to VGA adapters are available), 1 RCA female
TP T BNC, TP T BNC DA4	5 BNC female
TP T AV .....	1 RCA female
Nominal level .....	1 V <sub>p-p</sub> for Y of component video and S-video, and for composite video 0.7 V <sub>p-p</sub> for RGB and for R-Y and B-Y of component video 0.3 V <sub>p-p</sub> for C of S-video
Minimum/maximum levels .....	0.3 V to 1.45 V <sub>p-p</sub> with no offset at unity gain
Impedance .....	75 ohms
Horizontal frequency .....	15 kHz to 130 kHz
Vertical frequency .....	30 Hz to 150 Hz
Return loss .....	<-30 dB @ 5 MHz
DC offset (max. allowable) .....	100 mV

## Video output — refer to the TP Receivers Family User's Manual, part #68-547-02

## Audio — audio models

Number/signal type .....	1 or 2 sets of analog proprietary signals
Connectors	
TP T A 45 .....	(1) 2-pin direct insertion captive screw connector
All other models .....	1 or 2 shielded RJ-45 female
Frequency response .....	20 Hz to 20 kHz, ±0.05 dB
THD + Noise .....	0.03% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N .....	>63 dB at maximum output (unweighted)
Crosstalk .....	<-80 dB @ 1 kHz, fully loaded
Stereo channel separation .....	>80 dB @ 1 kHz
CMRR .....	>33 dB @ 20 Hz to 20 kHz

## Audio input — audio models

Number/signal type	
TP T 15HD A, TP T AV, TP T 460, TP T A 45	1 stereo, unbalanced
TP T 15HD AV .....	2 stereo, unbalanced
Connectors	
TP T 15HD A, TP T 460, TP T A 45	(1) 3.5 mm mini jack
TP T 15HD AV .....	(1) 3.5 mm mini jack, 2 female RCA
TP T AV .....	2 female RCA
Impedance	
TP T A 45 .....	>10k ohms, unbalanced, DC coupled
All other models .....	5k ohms, unbalanced, DC coupled
Nominal level .....	-10 dBV (316 mV)
Maximum level .....	+5.5 dBu, (unbalanced) at 1%THD+N
CMRR .....	>75 dB @ 20 Hz to 20 kHz

**NOTE** 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu.

## Audio output — refer to the TP Receivers Family User's Manual, part #68-547-02

### General

#### Power

TP T 15HD A, TP T 15HD AV, TP TBNC, TP T 460	15 VDC, 0.8 A, external or provided by the TP R receiver for up to 300' distance
TP T AV .....	15 VDC, 0.8 A, external or provided by the TP R receiver for up to 800' distance
TP T BNC DA4 .....	15 VDC, 0.8 A, external
TP T 15HD 45 .....	12 VDC, 1.0 A, external
TP T A 45 .....	Shared with the TP T 15HD 45 transmitter

**NOTE** The TP R 15HD A receiver will not provide power to any twisted pair transmitter.

Temperature/humidity .....	Storage -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
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Cooling .....	Convection, unvented
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#### Rack mount

TP T 15HD A, TP T 15HD AV, TP T BNC, TP T BNC DA4	Yes, with optional 1U, 9.5" deep rack shelf, part #60-190-01 (RSU 129) or #60-604-01 (RSB 129); or 1U, 3.5" deep VersaTools® rack shelf, part #60-190-20 (RSF 123) or #60-604-20 (RSB 123); and rack shelf mounting kit, part #70-123-01 (RSM 100). Back of the rack-mountable with VersaTools Back of Rack Mounting Kit, part #70-367-01 (MBB 100) Furniture mountable with optional mounting brackets, part #70-077-01 (MBU 125) or #70-077-02 (MBD 129)
TP T AV .....	No, but furniture mountable with optional mounting brackets #70-077-01 (MBU 125) or # 70-077-02 (MBD 129)
TP T 460 .....	No, but wall or furniture mountable
TP T 15HD 45, TP T A 45	No, but mountable in a 45 mm x 45 mm opening in common European wall boxes, floor boxes, or cable channel systems

Enclosure type .....	Metal
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#### Enclosure dimensions

TP T 15HD A, TP T 15HD AV, TP T BNC, TP T BNC DA4	1.3" H x 6.8" W x 4.5" D (<1U high, <half rack wide) (3.3 cm H x 17.3 cm W x 11.4 cm D) (Depth excludes connectors.)
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TP T AV .....	1.3" H x 4.8" W x 4.5" D (3.3 cm H x 12.2 cm W x 11.4 cm D) (Depth excludes connectors.)
TP T 460	
Plate .....	4.5" H x 4.6" W x 0.1" D (11.4 cm H x 11.7 cm W x 0.3 cm D) (2 gang)
Device .....	2.6" H x 3.1" W x 1.1" D (6.6 cm H x 7.9 cm W x 2.8 cm D) (Depth excludes front panel connectors and controls.)
TP T 460 EC	
Faceplate .....	3.25" H x 3.9" W x 0.1" D (8.3 cm H x 10.0 cm W x 0.3 cm D)
Device .....	2.5" H x 3.7" W x 1.75" D (6.4 cm H x 9.4 cm W x 4.5 cm D) (Depth excludes connectors and knobs.)
TP T 15HD 45, TP T A 45	
Faceplate .....	1.8" H x 1.8" W x 0.8" D (45 mm H x 45 mm W x 20 mm D)
Device .....	1.1" H x 1.6" W x 1.2" D (29 mm H x 41 mm W x 30 mm D) (Depth excludes connectors.)

Product weight

TPT 15HDA, TPT 15HDAV	0.8 lbs (0.4 kg)
TP T BNC, TP T BNC DA4	0.9 lbs (0.4 kg)
TP T AV .....	0.5 lbs (0.3 kg)
TP T 460, TP T 460 EC .....	0.5 lbs (0.3 kg)
TP T 15HD 45, TP T A 45	0.3 lbs (0.1 kg)

Shipping weight

TP T AV .....	2 lbs (1 kg)
All other models .....	3 lbs (2 kg)

Vibration ..... ISTA 1A in carton (International Safe Transit Association)

Listings (all models except TP T 15HD 45 and TP T A 45)  
UL, CUL

Compliances ..... CE, FCC Class A, VCCI, AS/NZS, ICES

MTBF ..... 30,000 hours

Warranty ..... 3 years parts and labor

**NOTE** All nominal levels are at  $\pm 10\%$ .

**NOTE** Specifications are subject to change without notice.

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