



2014

TS Product Catalogue



**Analogue
Surveillance**



TSCB4301

HD WDR 720p HDCCTV Box Camera with SDI Output

Box, 720p real time, H.264, WDR, day and night ICR, privacy zone mask, multi shutter speed, without lens



Features

- HD 720p HD-SDI CCTV camera
- 1/3-inch Panasonic 1.3-megapixel progressive scan CMOS image sensor
- 0.05 lux minimum illumination at AGC on, sensitivity up off, F1.2
- 3D digital noise reduction (DNR)
- Wide dynamic range (WDR)
- HDV and SDV video output simultaneously
- Industry standard (SMPTE-292M) HD-SDI output
- Automatic removable IR cut filter for IR sensitivity at night
- On screen display (OSD) control by RS-485 remote control or by coaxial control

Tech Specs

Model	TSCB4301
Type	Indoor, box camera
Video Standard	PAL/NTSC
Image Sensor	1/3-inch Panasonic 1.3-megapixel progressive scan CMOS image sensor
Resolutions	1280 × 720
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 720p • NTSC: maximum 30 frames per second at 720p
SDI Standards	HD-SDI (SMPTE-292M)
Minimum Illumination	0.05 lux at AGC on, Sensitivity up off, F1.2
Wide Dynamic Range (WDR)	128X
Digital Video Output	BNC (HD-SDI), YUV-422
Analog Video Output	CVBS

Model	TSCB4301
Audio	-
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	Compatible with infrared illuminator
Day and Night Mode	Color/Black and white/Auto/External
On Screen Display (OSD)	RS-485 remote control or coaxial control
Electronic Shutter Range	<ul style="list-style-type: none"> • Auto: 1/50 (60) s to 1/120,000 s • Manual: Off (1/50 (60) s), FL 1/100 (120) s, 1/250 s, 1/500 s, 1/1,000 s, 1/2,500 s, 1/5,000 s, 1/10,000 s, 1/30,000 s
Automatic Gain Control	0 dB to 42 dB
White Balance	ATW1/ATW2/AWC/Manual/Indoor/Outdoor
Back Light Compensation	BLC/Off
Fog Reduction	Auto/High/Middle/Low/Off
Flickerless	-
Digital Noise Reduction (DNR)	3D (high/middle/low)
Languages	English, Japanese, Traditional Chinese, Simplified Chinese
Image Settings	Negative, sharpness, mirror
Privacy Masking Zones	On/Off, zone number, zone display, horizontal position, vertical position, horizontal size, vertical size, Y level, CR level, CB level
Connectors	<ul style="list-style-type: none"> • BNC × 1 • HDMI output × 1
Automatic Iris	DC, D4 iris jack
Lens	CS/C mount (with adaptor ring)
Protection Rating	-
Input Power	12 V DC
Power Consumption	4.2 W
Operating Ambient Temperature	-10 °C to 50 °C (14 °F to 122 °F)
Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Relative Humidity	5 % to 80 % noncondensing
Dimensions (W × H × L)	51 mm × 51 mm × 100 mm (2.01 in × 2.01 in × 3.94 in)
Weight	0.4 kg (0.88 lb)
Related Products	TSAL0130: Lens

*Design and specifications are subject to change without prior notice.

TSCB4602

Full HD WDR 1080p 30 fps HDCCTV Box Camera

Box, 1080p real time, H.264, WDR, day and night ICR, privacy zone mask, multi shutter speed, without lens



Features

- Full HD 1080p HD-SDI CCTV camera
- 1/3-inch Panasonic 1.3-megapixel progressive scan CMOS image sensor
- 0.05 lux minimum illumination at AGC on, sensitivity up off, F1.2
- 3D digital noise reduction (DNR)
- Wide dynamic range (WDR)
- HDV and SDV video output simultaneously
- Industry standard (SMPTE-292M) HD-SDI output
- Automatic removable IR cut filter for IR sensitivity at night
- On screen display (OSD) control by RS-485 remote control or by coaxial control

Tech Specs

Model	TSCB4602
Type	Indoor, box camera
Video Standard	PAL/NTSC
Image Sensor	1/3-inch Panasonic 1.3-megapixel progressive scan CMOS image sensor
Resolutions	1920 × 1080
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1080p • NTSC: maximum 30 frames per second at 1080p
SDI Standards	HD-SDI (SMPTE-292M)
Minimum Illumination	0.05 lux at AGC on, Sensitivity up off, F1.2
Wide Dynamic Range (WDR)	128X
Digital Video Output	BNC (HD-SDI), YUV-422
Analog Video Output	CVBS

Model	TSCB4602
Audio	-
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	Compatible with infrared illuminator
Day and Night Mode	Color/Black and white/Auto/External
On Screen Display (OSD)	RS-485 remote control or coaxial control
Electronic Shutter Range	<ul style="list-style-type: none"> • Auto: 1/50 (60) s to 1/120,000 s • Manual: Off (1/50 (60) s), FL 1/100 (120) s, 1/250 s, 1/500 s, 1/1,000 s, 1/2,500 s, 1/5,000 s, 1/10,000 s, 1/30,000 s
Automatic Gain Control	0 dB to 42 dB
White Balance	ATW1/ATW2/AWC/Manual/Indoor/Outdoor
Back Light Compensation	BLC/Off
Fog Reduction	Auto/High/Middle/Low/Off
Flickerless	-
Digital Noise Reduction (DNR)	3D (high/middle/low)
Languages	English, Japanese, Traditional Chinese, Simplified Chinese
Image Settings	Negative, sharpness, mirror
Privacy Masking Zones	On/Off, zone number, zone display, horizontal position, vertical position, horizontal size, vertical size, Y level, CR level, CB level
Connectors	<ul style="list-style-type: none"> • BNC × 1 • HDMI output × 1
Automatic Iris	DC, D4 iris jack
Lens	CS/C mount (with adaptor ring)
Protection Rating	-
Input Power	12 V DC
Power Consumption	4.2 W
Operating Ambient Temperature	-10 °C to 50 °C (14 °F to 122 °F)
Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Relative Humidity	5 % to 80 % noncondensing
Dimensions (W × H × L)	51 mm × 51 mm × 100 mm (2.01 in × 2.01 in × 3.94 in)
Weight	0.4 kg (0.88 lb)
Related Products	TSAL0130: Lens

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TSCD1602

Full HD WDR 1080p 30 fps HDCCTV Vandal Dome Camera

Outdoor dome, 1080p at 30 fps, H.264, WDR, day and night ICR, privacy zone mask, multi shutter speed, IP66, f = 2.8 to 12 mm vari-focal auto iris lens, IR illuminator with distance up to 20 m



Features

- IP66, NEMA-4X enclosure rating
- Full HD 1080p HD-SDI CCTV camera
- 1/3-inch Panasonic 1.3-megapixel progressive scan CMOS image sensor
- 0 lux minimum illumination at IR LED on
- 3D digital noise reduction (DNR)
- Wide dynamic range (WDR)
- HDV and SDV video output simultaneously
- Industry standard (SMPTE-292M) HD-SDI output
- Automatic removable IR cut filter for IR sensitivity at night
- On screen display (OSD) control by RS-485 remote control or by coaxial control
- Built-in f = 2.8 to 12 mm vari-focal DC auto iris lens
- Integrated adaptive IR illumination

Tech Specs

Model	TSCD1602
Type	Indoor/Outdoor, dome camera
Video Standard	PAL/NTSC
Image Sensor	1/3-inch Panasonic 1.3-megapixel progressive scan CMOS image sensor
Resolutions	1920 × 1080
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1080p • NTSC: maximum 30 frames per second at 1080p
SDI Standards	HD-SDI (SMPTE-292M)
Minimum Illumination	0 lux at IR LED on
Wide Dynamic Range (WDR)	128X

Model	TSCD1602
Digital Video Output	BNC (HD-SDI), YUV-422
Analog Video Output	CVBS
Audio	-
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	<ul style="list-style-type: none"> • 30 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 10 m to 20 m (32.8 ft to 65.6 ft)
Day and Night Mode	Color/Black and white/Auto/External
On Screen Display (OSD)	RS-485 remote control or coaxial control
Electronic Shutter Range	<ul style="list-style-type: none"> • Auto: 1/50 (60) s to 1/120,000 s • Manual: Off (1/50 (60) s), FL 1/100 (120) s, 1/250 s, 1/500 s, 1/1,000 s, 1/2,500 s, 1/5,000 s, 1/10,000 s, 1/30,000 s
Automatic Gain Control	0 dB to 42 dB
White Balance	ATW1/ATW2/AWC/Manual/Indoor/Outdoor
Back Light Compensation	BLC/Off
Fog Reduction	Auto/High/Middle/Low/Off
Flickerless	-
Digital Noise Reduction (DNR)	3D (high/middle/low)
Languages	English, Japanese, Traditional Chinese, Simplified Chinese
Image Settings	Negative, sharpness, mirror
Privacy Masking Zones	On/Off, zone number, zone display, horizontal position, vertical position, horizontal size, vertical size, Y level, CR level, CB level
Connectors	<ul style="list-style-type: none"> • BNC × 1 • HDMI output × 1
Automatic Iris	DC
Lens	f = 2.8 to 12 mm vari-focal DC auto iris
Protection Rating	IP66, NEMA-4X enclosure rating
Input Power	12 V DC
Power Consumption	9 W
Operating Ambient Temperature	-10 °C to 50 °C (14 °F to 122 °F)
Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Relative Humidity	5 % to 80 % noncondensing
Dimensions (Ø × H)	140 mm × 112 mm (5.51 in × 4.41 in)
Weight	0.55 kg (1.21 lb)
Related Products	-

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TSCD1704

Full HD WDR 1080p 60 fps HDCCTV Indoor Dome Camera with IR LED Illuminator

Indoor dome, 1080p at 60 fps, H.264, WDR, day and night ICR, privacy zone mask, multi shutter speed, with f = 3 to 10 mm vari-focal auto iris lens



Features

- Full HD 1080p at 50/60 frames per second 3G-SDI CCTV camera
- 1/2.8-inch Sony 3-megapixel progressive scan Exmor™ CMOS image sensor
- 0 lux minimum illumination at IR LED on
- Wide dynamic range (WDR)
- SDI and composite BNC video output simultaneously
- Industry standard (SMPTE-424M) 3G-SDI output
- Automatic removable IR cut filter for IR sensitivity at night
- On screen display (OSD) control by RS-485 remote control or by coaxial control
- Built-in f = 3 to 10 mm vari-focal DC auto iris lens
- Integrated adaptive IR illumination

Tech Specs

Model	TSCD1704
Type	Indoor, dome camera
Video Standard	PAL/NTSC
Image Sensor	1/2.8-inch Sony 3-megapixel progressive scan Exmor™ CMOS image sensor
Resolutions	1920 × 1080
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 50 frames per second at 1080p (adjustable to 25 frames per second at 1080p, 50 frames per second at 1080i) • NTSC: maximum 60 frames per second at 1080p (adjustable to 30 frames per second at 1080p, 60 frames per second at 1080i)
SDI Standards	3G-SDI (SMPTE-424M)
Minimum Illumination	0 lux at IR LED on

Model	TSCD1704
Wide Dynamic Range (WDR)	54 dB, 512X
Digital Video Output	BNC (3G-SDI), HDMI
Analog Video Output	BNC (1 Vp-p composite, 75 ohm)
Audio	-
IR Cut Filter	Automatically switches (black and white mode: < 2 lux, color mode: > 5 lux)
IR Illumination	<ul style="list-style-type: none"> • 30 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 10 m to 20 m (32.8 ft to 65.6 ft)
Day and Night Mode	Color/Black and white/Auto/External
On Screen Display (OSD)	RS-485 remote control or coaxial control
Electronic Shutter Range	<ul style="list-style-type: none"> • Auto: 1/50 (60) s to 1/10,000 s • Manual: 1/50 (60) s, 1/100 (120) s, 1/150 (180) s, 1/200 (240) s, 1/250 s, 1/300 s, 1/350 s, 1/400 s, 1/450 s, 1/500 s, 1/600 s, 1/750 s, 1/1,000 s, 1/2,000 s, 1/3,000 s, 1/4,000 s, 1/10,000 s
Automatic Gain Control	128 adjustable level settings
White Balance	ATW/AWB/Manual/Push lock/3200 K/6300 K
Back Light Compensation	BLC/Off
Fog Reduction	16 adjustable level settings (0 to 15)
Flickerless	PAL 50 Hz/NTSC 60 Hz/Off
Digital Noise Reduction (DNR)	2D
Languages	English, Japanese, Traditional Chinese, Simplified Chinese (option not changeable)
Image Settings	Sharpness, contrast, saturation, hue, mirror
Privacy Masking Zones	On/Off (16 zones programmable, mosaic)
Connectors	<ul style="list-style-type: none"> • BNC × 1 • RS-485 (Pelco-D/P) × 1 • Digital input × 1 • Digital output × 1
Automatic Iris	DC
Lens	f = 3 to 10 mm vari-focal DC auto iris
Protection Rating	-
Input Power	12 V DC
Power Consumption	9 W
Operating Ambient Temperature	-10 °C to 50 °C (14 °F to 122 °F)
Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Relative Humidity	5 % to 80 % noncondensing
Dimensions (Ø × H)	140 mm × 112 mm (5.51 in × 4.41 in)
Weight	0.55 kg (1.21 lb)
Related Products	-

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TSCD1706

Full HD WDR 1080p 60 fps HDCCTV Weather Proof Dome Camera with IR LED Illuminator

Outdoor dome, 1080p at 60 fps, H.264, WDR, day and night ICR, privacy zone mask, multi shutter speed, IP66, with f = 3 to 10 mm vari-focal auto iris lens, IR illuminator with distance up to 20 m



Features

- IP66, NEMA-4X enclosure rating
- Full HD 1080p at 50/60 frames per second 3G-SDI CCTV camera
- 1/2.8-inch Sony 3-megapixel progressive scan Exmor™ CMOS image sensor
- 0 lux minimum illumination at IR LED on
- Wide dynamic range (WDR)
- SDI and composite BNC video output
- Industry standard (SMPTE-424M) 3G-SDI output
- Automatic removable IR cut filter for IR sensitivity at night
- On screen display (OSD) control by RS-485 remote control or by coaxial control
- Built-in f = 3 to 10 mm vari-focal DC auto iris lens
- Integrated adaptive IR illumination

Tech Specs

Model	TSCD1706
Type	Indoor/Outdoor, dome camera
Video Standard	PAL/NTSC
Image Sensor	1/2.8-inch Sony 3-megapixel progressive scan Exmor™ CMOS image sensor
Resolutions	1920 × 1080
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 50 frames per second at 1080p (adjustable to 25 frames per second at 1080p, 50 frames per second at 1080i) • NTSC: maximum 60 frames per second at 1080p (adjustable to 30 frames per second at 1080p, 60 frames per second at 1080i)
SDI Standards	3G-SDI (SMPTE-424M)

Model	TSCD1706
Minimum Illumination	0 lux at IR LED on
Wide Dynamic Range (WDR)	54 dB, 512X
Digital Video Output	BNC (3G-SDI), HDMI
Analog Video Output	BNC (1 Vp-p composite, 75 ohm)
Audio	-
IR Cut Filter	Automatically switches (black and white mode: < 2 lux, color mode: > 5 lux)
IR Illumination	<ul style="list-style-type: none"> • 30 pieces IR LEDs (on < 2 lux, off > 5 lux) • Illumination distance: 10 m to 20 m (32.8 ft to 65.6 ft)
Day and Night Mode	Color/Black and white/Auto/External
On Screen Display (OSD)	RS-485 remote control or coaxial control
Electronic Shutter Range	<ul style="list-style-type: none"> • Auto: 1/50 (60) s to 1/10,000 s • Manual: 1/50 (60) s, 1/100 (120) s, 1/150 (180) s, 1/200 (240) s, 1/250 s, 1/300 s, 1/350 s, 1/400 s, 1/450 s, 1/500 s, 1/600 s, 1/750 s, 1/1,000 s, 1/2,000 s, 1/3,000 s, 1/4,000 s, 1/10,000 s
Automatic Gain Control	128 adjustable level settings
White Balance	ATW/AWB/Manual/Push lock/3200 K/6300 K
Back Light Compensation	BLC/Off
Fog Reduction	16 adjustable level settings (0 to 15)
Flickerless	PAL 50 Hz/NTSC 60 Hz/Off
Digital Noise Reduction (DNR)	2D
Languages	English, Japanese, Traditional Chinese, Simplified Chinese (option not changeable)
Image Settings	Sharpness, contrast, saturation, hue, mirror
Privacy Masking Zones	On/Off (16 zones programmable, mosaic)
Connectors	<ul style="list-style-type: none"> • BNC × 1 • RS-485 (Pelco-D/P) × 1 • Digital input × 1 • Digital output × 1
Automatic Iris	DC
Lens	f = 3 to 10 mm vari-focal DC auto iris
Protection Rating	IP66, NEMA-4X enclosure rating
Input Power	12 V DC
Power Consumption	9 W
Operating Ambient Temperature	-10 °C to 50 °C (14 °F to 122 °F)
Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Relative Humidity	5 % to 80 % noncondensing
Dimensions (Ø × H)	140 mm × 112 mm (5.51 in × 4.41 in)
Weight	1 kg (2.20 lb)
Related Products	-

*Design and specifications are subject to change without prior notice.

TSCD2601

Full HD WDR 1080p 30 fps HDCCTV Outdoor Dome Camera

Outdoor dome, 1080p at 30 fps, H.264, WDR, day and night ICR, privacy zone mask, multi shutter speed, IP66, f = 2.8 to 12 mm vari-focal auto iris lens



Features

- IP66, NEMA-4X enclosure rating
- Full HD 1080p HD-SDI CCTV camera
- 1/3-inch Panasonic 1.3-megapixel progressive scan CMOS image sensor
- 0.05 lux minimum illumination at AGC on, sensitivity up off, F1.2
- 3D digital noise reduction (DNR)
- Wide dynamic range (WDR)
- HDV and SDV video output simultaneously
- Industry standard (SMPTE-292M) HD-SDI output
- Automatic removable IR cut filter for IR sensitivity at night
- On screen display (OSD) control by RS-485 remote control or by coaxial control
- Built-in f = 2.8 to 12 mm vari-focal DC auto iris lens

Tech Specs

Model	TSCD2601
Type	Indoor/Outdoor, dome camera
Video Standard	PAL/NTSC
Image Sensor	1/3-inch Panasonic 1.3-megapixel progressive scan CMOS image sensor
Resolutions	1920 × 1080
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 25 frames per second at 1080p • NTSC: maximum 30 frames per second at 1080p
SDI Standards	HD-SDI (SMPTE-292M)
Minimum Illumination	0.05 lux at AGC on, Sensitivity up off, F1.2
Wide Dynamic Range (WDR)	128X
Digital Video Output	BNC (HD-SDI), YUV-422

Model	TSCD2601
Analog Video Output	CVBS
Audio	-
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	Compatible with infrared illuminator
Day and Night Mode	Color/Black and white/Auto/External
On Screen Display (OSD)	RS-485 remote control or coaxial control
Electronic Shutter Range	<ul style="list-style-type: none"> • Auto: 1/50 (60) s to 1/120,000 s • Manual: Off (1/50 (60) s), FL 1/100 (120) s, 1/250 s, 1/500 s, 1/1,000 s, 1/2,500 s, 1/5,000 s, 1/10,000 s, 1/30,000 s
Automatic Gain Control	0 dB to 42 dB
White Balance	ATW1/ATW2/AWC/Manual/Indoor/Outdoor
Back Light Compensation	BLC/Off
Fog Reduction	Auto/High/Middle/Low/Off
Flickerless	-
Digital Noise Reduction (DNR)	3D (high/middle/low)
Languages	English, Japanese, Traditional Chinese, Simplified Chinese
Image Settings	Negative, sharpness, mirror
Privacy Masking Zones	On/Off, zone number, zone display, horizontal position, vertical position, horizontal size, vertical size, Y level, CR level, CB level
Connectors	<ul style="list-style-type: none"> • BNC × 1 • HDMI output × 1
Automatic Iris	DC
Lens	f = 2.8 to 12 mm vari-focal DC auto iris
Protection Rating	IP66, NEMA-4X enclosure rating
Input Power	12 V DC
Power Consumption	4.2 W
Operating Ambient Temperature	-10 °C to 50 °C (14 °F to 122 °F)
Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Relative Humidity	5 % to 80 % noncondensing
Dimensions (Ø × H)	142 mm × 84 mm (0.47 in × 0.28 in)
Weight	0.5 kg (1.10 lb)
Related Products	-

*Design and specifications are subject to change without prior notice.

TSCD2705

Full HD WDR 1080p 60 fps HDCCTV Weather Proof Dome Camera

Outdoor dome, 1080p at 60 fps, H.264, WDR, day and night ICR, privacy zone mask, multi shutter speed, IP66, with f = 3 to 10 mm vari-focal auto iris lens



Features

- IP66, NEMA-4X enclosure rating
- Full HD 1080p at 50/60 frames per second 3G-SDI CCTV camera
- 1/2.8-inch Sony 3-megapixel progressive scan Exmor™ CMOS image sensor
- 0.1 lux minimum illumination in color mode, 0.01 lux minimum illumination in black and white mode and 0.001 lux minimum illumination in sensitivity up mode
- Wide dynamic range (WDR)
- SDI and composite BNC video output simultaneously
- Industry standard (SMPTE-424M) 3G-SDI output
- Automatic removable IR cut filter for IR sensitivity at night
- On screen display (OSD) control by RS-485 remote control or by coaxial control
- Built-in f = 3 to 10 mm vari-focal DC auto iris lens
- 2-way audio

Tech Specs

Model	TSCD2705
Type	Indoor/Outdoor, dome camera
Video Standard	PAL/NTSC
Image Sensor	1/2.8-inch Sony 3-megapixel progressive scan Exmor™ CMOS image sensor
Resolutions	1920 × 1080
Frame Rate	<ul style="list-style-type: none"> • PAL: maximum 50 frames per second at 1080p (adjustable to 25 frames per second at 1080p, 50 frames per second at 1080i) • NTSC: maximum 60 frames per second at 1080p (adjustable to 30 frames per second at 1080p, 60 frames per second at 1080i)

Model	TSCD2705
SDI Standards	3G-SDI (SMPTE-424M)
Minimum Illumination	<ul style="list-style-type: none"> • Color mode: 0.1 lux at F1.3 • Black and white mode: 0.01 lux at F1.3 • Sensitivity up mode: 0.001 lux at F1.3
Wide Dynamic Range (WDR)	54 dB, 512X
Digital Video Output	BNC (3G-SDI), HDMI
Analog Video Output	BNC (1 Vp-p composite, 75 ohm)
Audio	2-way audio
IR Cut Filter	Automatically switches (switching lux level can be adjusted)/External
IR Illumination	Compatible with infrared illuminator
Day and Night Mode	Color/Black and white/Auto/External
On Screen Display (OSD)	RS-485 remote control or coaxial control
Electronic Shutter Range	<ul style="list-style-type: none"> • Auto: 1/50 (60) s to 1/10,000 s • Manual: 1/50 (60) s, 1/100 (120) s, 1/150 (180) s, 1/200 (240) s, 1/250 s, 1/300 s, 1/350 s, 1/400 s, 1/450 s, 1/500 s, 1/600 s, 1/750 s, 1/1,000 s, 1/2,000 s, 1/3,000 s, 1/4,000 s, 1/10,000 s
Automatic Gain Control	128 adjustable level settings
White Balance	ATW/AWB/Manual/Push lock/3200 K/6300 K
Back Light Compensation	BLC/Off
Fog Reduction	16 adjustable level settings (0 to 15)
Flickerless	PAL 50 Hz/NTSC 60 Hz/Off
Digital Noise Reduction (DNR)	2D
Languages	English, Japanese, Traditional Chinese, Simplified Chinese (option not changeable)
Image Settings	Sharpness, contrast, saturation, hue, mirror
Privacy Masking Zones	On/Off (16 zones programmable, mosaic)
Connectors	<ul style="list-style-type: none"> • BNC × 1 • RS-485 (Pelco-D/P) × 1 • Digital input × 1 • Digital output × 1 • Audio input (Ø 3.5 mm stereo mini-jack) × 1 • Audio output (Ø 3.5 mm stereo mini-jack) × 1
Automatic Iris	DC
Lens	f = 3 to 10 mm vari-focal DC auto iris
Protection Rating	IP66, NEMA-4X enclosure rating
Input Power	12 V DC or 12 V DC/24 V AC, PoC (Power over Cable) optional
Power Consumption	4.2 W
Operating Ambient Temperature	-10 °C to 50 °C (14 °F to 122 °F)
Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Relative Humidity	5 % to 80 % noncondensing
Dimensions (Ø × H)	140 mm × 112 mm (5.51 in × 4.41 in)
Weight	0.95 kg (2.09 lb)
Related Products	-

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TSCR5601

4 Channels HD-SDI DVR



Features

- Supports 4 HD-SDI analog cameras
- Up to 60/50 frames per second at 1080p resolution
- Supports H.264 stream recording
- Flexible viewing with two monitor outputs
- Triple streaming for local recording, playback, and remote viewing
- Supports Mac system
- Supports 3G mobile system
- Supports touch-panel LCD monitor

Tech Specs

Model	TSCR5601
Video Input	3G-SDI (1080p at 60/50/30/25 frames per second, 1080i at 60/50 frames per second, 720p at 60/50 frames per second) × 4
Video Output	Maximum 1920 × 1080 pixels <ul style="list-style-type: none"> • HDMI × 1 • VGA × 1 • BNC (NTSC/PAL) × 1
Audio Input	<ul style="list-style-type: none"> • HD-SDI × 4 • RCA × 4 (1 shared RCA for 2-way audio)
Audio Output	RCA × 2
Operating System	Embedded Linux OS
SATA Devices	Maximum SATA devices × 7 (HDD × 6 + eSATA × 1, HDD × 4 + DVD × 1 + eSATA × 1)
External Storage	Yes (eSATA)
Sensor Input	Sensor-in × 4
Relay Output	Relay-out × 4
Serial Interface	RS-485
USB Ports	USB 2.0 port × 2

Model	TSCR5601
Dimensions (W × H × L)	442 mm × 92 mm × 438 mm (17.40 in × 3.62 in × 17.24 in)
Weight	5 kg (11.02 lb) (without HDD/DVD±RW)
Input Power	220 V AC/110 V AC
Power Consumption	220 W
Display Speed	120 frames per second at 1080p/720p
Display Split Screen	1, 4, SEQ.
Display Auto Channel Switching	Switching time: 1 s to 99 s
Display Mode	2X to 8X digital zoom, PIP, auto SEQ
Video Compression	H.264
Main Recording Resolution	1920 × 1080 pixels/1280 × 720 pixels
Sub (Network) Recording Resolution	640 × 360 pixels/320 × 180 pixels
Recording Picture Quality	10 to 100 adjustable level settings
Recording Mode	Normal, manual, event, schedule
Recording Speed	120 frames per second
Recording Pre-Alarm	1 s to 10 s
Recording Post-Alarm	1 s to 100 s
Playback Display	1, 4
Playback Search Mode	Date/Time, event
Playback Zoom	2X to 8X digital zoom
Playback Snapshot	Yes
Playback Speed	Play, pause, stop, slow (1/2, 1/4, 1/8), FF (4, 8, 16, 32), REW (4, 8, 16, 32), frame step
Playback Device	Internal HDD/eSATA
Network Interface	10BASE-T/100BASE-TX/1000BASE-T Ethernet
Supported Protocols	TCP/IP, SMTP, HTTP, DHCP, PPPoE (ADSL), NTP, DDNS
Application Operating System	Windows XP, Windows VISTA, Windows 7, Mac OS X
Remote Software	iWatch DVR, IE browser
Users	1 admin + 8 users
CMS	CMS for Windows XP, Windows Vista, Windows 7
Mobile Device	Windows Phone, Blackberry, iPhone, iPad, Android
Event Transport	E-mail
Backup Interface	USB 2.0 or SATA
Audio Backup	Yes
Network	Yes
Backup Device (Optional)	iWatch DVR, USB flash drive, USB DVD±RW, SATA DVD±RW, blu-ray-R
Motion Detection	<ul style="list-style-type: none"> • Sensitivity: 100 levels for each channel • Area: Programmable individually
Event Log	Up to the 10,000 events (sensor, motion, video loss, power on, remote login, logout, HDD error, HDD full)
Languages	Multi-language
Camera Titles	Multi-language
USB Keyboard and Mouse	Yes
Touch Panel	Touch panel LCD monitor (USB interface, EETI chipset only)
Remote Controller	IR remote control
System Upgrade	iWatch DVR, USB flash drive
Pan/Tilt/Zoom Control	RS-485 interface (Pelco P, Pelco D, Samsung, LG, LiLin)

*Design and specifications are subject to change without prior notice.

TSCR5602

4 Channels HD-SDI DVR



Features

- Supports 4 3G-SDI analog cameras
- Up to 60/50 frames per second at 1080p resolution
- Supports H.264 stream recording
- Flexible viewing with two monitor outputs
- Triple streaming for local recording, playback, and remote viewing
- Supports Mac system
- Supports 3G mobile system
- Supports touch-panel LCD monitor

Tech Specs

Model	TSCR5602
Video Input	3G-SDI (1080p at 60/50/30/25 frames per second, 1080i at 60/50 frames per second, 720p at 60/50 frames per second) × 4
Video Output	Maximum 1920 × 1080 pixels <ul style="list-style-type: none"> • HDMI × 1 • VGA × 1 • BNC (NTSC/PAL) × 1
Audio Input	<ul style="list-style-type: none"> • HD-SDI × 4 • RCA × 4 (1 shared RCA for 2-way audio)
Audio Output	RCA × 2
Operating System	Embedded Linux OS
SATA Devices	Maximum SATA devices × 4 (HDD × 3 + eSATA × 1, HDD × 2 + DVD × 1 + eSATA × 1)
External Storage	Yes (eSATA)
Sensor Input	Sensor-in × 4
Relay Output	Relay-out × 2
Serial Interface	RS-485
USB Ports	USB 2.0 port × 2

Model	TSCR5602
Dimensions (W × H × L)	430 mm × 55 mm × 293 mm (16.93 in × 2.17 in × 11.54 in)
Weight	2 kg (4.41 lb) (without HDD/DVD±RW)
Input Power	<ul style="list-style-type: none"> • Input: 100 V to 240 V AC, • Output: 12 V DC, 6 A
Power Consumption	72 W
Display Speed	120 frames per second at 1080p/720p
Display Split Screen	1, 4
Display Auto Channel Switching	Switching time: 1 to 99 s
Display Mode	2X to 8X digital zoom, PIP, auto SEQ
Video Compression	H.264
Main Recording Resolution	1920 × 1080 pixels/1280 × 720 pixels
Sub (Network) Recording Resolution	640 × 360 pixels/320 × 180 pixels
Recording Picture Quality	10 to 100 adjustable level settings
Recording Mode	Normal, manual, event, schedule
Recording Speed	120 frames per second
Recording Pre-Alarm	1 s to 10 s
Recording Post-Alarm	1 s to 100 s
Playback Display	1, 4
Playback Search Mode	Date/Time, event
Playback Zoom	2X to 8X digital zoom
Playback Snapshot	Yes
Playback Speed	Play, pause, stop, slow (1/2, 1/4, 1/8), FF (4, 8, 16, 32), REW (4, 8, 16, 32), frame step
Playback Device	Internal HDD/eSATA
Network Interface	10BASE-T/100BASE-TX/1000BASE-T Ethernet
Supported Protocols	TCP/IP, SMTP, HTTP, DHCP, PPPoE (ADSL), NTP, DDNS
Application Operating System	Windows XP, Windows VISTA, Windows 7, Mac OS X
Remote Software	iWatch DVR, IE browser
Users	1 admin + 8 users
CMS	CMS for Windows XP, Windows Vista, Windows 7
Mobile Device	Windows Phone, Blackberry, iPhone, iPad, Android
Event Transport	E-mail
Backup Interface	USB 2.0 or SATA
Audio Backup	Yes
Network	Yes
Backup Device (Optional)	iWatch DVR, USB flash drive, USB DVD±RW, SATA DVD±RW, blu-ray-R
Motion Detection	<ul style="list-style-type: none"> • Sensitivity: 100 levels for each channel • Area: Programmable individually
Event Log	Up to the 10,000 events (sensor, motion, video loss, power on, remote login, logout, HDD error, HDD full)
Languages	Multi-language
Camera Titles	Multi-language
USB Keyboard and Mouse	Yes
Touch Panel	Touch panel LCD monitor (USB interface, EETI chipset only)
Remote Controller	IR remote control
System Upgrade	iWatch DVR, USB flash drive
Pan/Tilt/Zoom Control	RS-485 interface (Pelco P, Pelco D, Samsung, LG, LiLin)

*Design and specifications are subject to change without prior notice.

TSCR6603

8 Channels HD-SDI DVR



Features

- Supports 8 3G-SDI analog cameras
- Up to 60/50 frames per second at 1080p resolution
- Supports H.264 stream recording
- Flexible viewing with two monitor outputs
- Triple streaming for local recording, playback, and remote viewing
- Supports Mac system
- Supports 3G mobile system
- Supports touch-panel LCD monitor

Tech Specs

Model	TSCR6603
Video Input	3G-SDI (1080p at 60/50/30/25 frames per second, 1080i at 60/50 frames per second, 720p at 60/50 frames per second) × 8
Video Output	Maximum 1920 × 1080 pixels <ul style="list-style-type: none"> • HDMI × 1 • VGA × 1 • BNC (NTSC/PAL) × 1
Audio Input	<ul style="list-style-type: none"> • HD-SDI × 8 • RCA × 8 (1 shared RCA for 2-way audio)
Audio Output	RCA × 2
Operating System	Embedded Linux OS
SATA Devices	Maximum SATA devices × 7 (HDD × 6 + eSATA × 1, HDD × 4 + DVD × 1 + eSATA × 1)
External Storage	Yes (eSATA)
Sensor Input	Sensor-in × 8
Relay Output	Relay-out × 4
Serial Interface	RS-485
USB Ports	USB 2.0 port × 2

Model	TSCR6603
Dimensions (W × H × L)	442 mm × 92 mm × 438 mm (17.4 in × 3.62 in × 17.24 in)
Weight	5.3 kg (without HDD/DVD±RW)
Input Power	220 V AC/110 V AC
Power Consumption	220 W
Display Speed	240 frames per second at 1080p/720p
Display Split Screen	1, 4, 8
Display Auto Channel Switching	Switching time: 1 s to 99 s
Display Mode	2X to 8X digital zoom, PIP, auto SEQ
Video Compression	H.264
Main Recording Resolution	1920 × 1080 pixels/1280 × 720 pixels
Sub (Network) Recording Resolution	640 × 360 pixels/320 × 180 pixels
Recording Picture Quality	10 to 100 adjustable level settings
Recording Mode	Normal, manual, event, schedule
Recording Speed	120 frames per second
Recording Pre-Alarm	1 s to 10 s
Recording Post-Alarm	1 s to 100 s
Playback Display	1, 4, 8
Playback Search Mode	Date/Time, event
Playback Zoom	2X to 8X digital zoom
Playback Snapshot	Yes
Playback Speed	Play, pause, stop, slow (1/2, 1/4, 1/8), FF (4, 8, 16, 32), REW (4, 8, 16, 32), frame step
Playback Device	Internal HDD/eSATA
Network Interface	10BASE-T/100BASE-TX/1000BASE-T Ethernet
Supported Protocols	TCP/IP, SMTP, HTTP, DHCP, PPPoE (ADSL), NTP, DDNS
Application Operating System	Windows XP, Windows VISTA, Windows 7, Mac OS X
Remote Software	iWatch DVR, IE browser
Users	1 admin + 8 users
CMS	CMS for Windows XP, Windows Vista, Windows 7
Mobile Device	Windows Phone, Blackberry, iPhone, iPad, Android
Event Transport	E-mail
Backup Interface	USB 2.0 or SATA
Audio Backup	Yes
Network	Yes
Backup Device (Optional)	iWatch DVR, USB flash drive, USB DVD±RW, SATA DVD±RW, blu-ray-R
Motion Detection	<ul style="list-style-type: none"> • Sensitivity: 100 levels for each channel • Area: Programmable individually
Event Log	Up to the 10,000 events (sensor, motion, video loss, power on, remote login, logout, HDD error, HDD full)
Languages	Multi-language
Camera Titles	Multi-language
USB Keyboard and Mouse	Yes
Touch Panel	Touch panel LCD monitor (USB interface, EETI chipset only)
Remote Controller	IR remote control
System Upgrade	iWatch DVR, USB flash drive
Pan/Tilt/Zoom Control	RS-485 interface (Pelco P, Pelco D, Samsung, LG, LiLin)

*Design and specifications are subject to change without prior notice.

TSCR7604

16 Channels HD-SDI DVR



Features

- Supports 16 3G-SDI analog cameras
- Up to 60/50 frames per second at 1080p resolution
- Supports H.264 stream recording
- Flexible viewing with two monitor outputs
- Triple streaming for local recording, playback, and remote viewing
- Supports Mac system
- Supports 3G mobile system
- Supports touch-panel LCD monitor

Tech Specs

Model	TSCR7604
Video Input	3G-SDI (1080p at 60/50/30/25 frames per second, 1080i at 60/50 frames per second, 720p at 60/50 frames per second) × 16
Video Output	Maximum 1920 × 1080 pixels <ul style="list-style-type: none"> • HDMI × 1 • VGA × 1 • BNC (NTSC/PAL) × 1
Audio Input	<ul style="list-style-type: none"> • HD-SDI × 16 • RCA × 8 (1 shared RCA for 2-way audio)
Audio Output	RCA × 2
Operating System	Embedded Linux OS
SATA Devices	Maximum SATA devices × 7 (HDD × 6 + eSATA × 1, HDD × 4 + DVD × 1 + eSATA × 1)
External Storage	Yes (eSATA)
Sensor Input	Sensor-in × 16
Relay Output	Relay-out × 4
Serial Interface	RS-485
USB Ports	USB 2.0 port × 2

Model	TSCR7604
Dimensions (W × H × L)	442 mm × 92 mm × 438 mm (17.40 in × 3.62 in × 17.24 in)
Weight	6 kg (13.23 lb) (without HDD/DVD±RW)
Input Power	220 V AC/110 V AC
Power Consumption	220 W
Display Speed	240 frames per second at 1080p/720p
Display Split Screen	1, 4, 8, 16
Display Auto Channel Switching	Switching time: 1 s to 99 s
Display Mode	2X to 8X digital zoom, PIP, auto SEQ
Video Compression	H.264
Main Recording Resolution	1920 × 1080 pixels/1280 × 720 pixels
Sub (Network) Recording Resolution	640 × 360 pixels/320 × 180 pixels
Recording Picture Quality	10 to 100 adjustable level settings
Recording Mode	Normal, manual, event, schedule
Recording Speed	120 frames per second
Recording Pre-Alarm	1 s to 10 s
Recording Post-Alarm	1 s to 100 s
Playback Display	1, 4, 8, 16
Playback Search Mode	Date/Time, event
Playback Zoom	2X to 8X digital zoom
Playback Snapshot	Yes
Playback Speed	Play, pause, stop, slow (1/2, 1/4, 1/8), FF (4, 8, 16, 32), REW (4, 8, 16, 32), frame step
Playback Device	Internal HDD/eSATA
Network Interface	10BASE-T/100BASE-TX/1000BASE-T Ethernet
Supported Protocols	TCP/IP, SMTP, HTTP, DHCP, PPPoE (ADSL), NTP, DDNS
Application Operating System	Windows XP, Windows VISTA, Windows 7, Mac OS X
Remote Software	iWatch DVR, IE browser
Users	1 admin + 8 users
CMS	CMS for Windows XP, Windows Vista, Windows 7
Mobile Device	Windows Phone, Blackberry, iPhone, iPad, Android
Event Transport	E-mail
Backup Interface	USB 2.0 or SATA
Audio Backup	Yes
Network	Yes
Backup Device (Optional)	iWatch DVR, USB flash drive, USB DVD±RW, SATA DVD±RW, blu-ray-R
Motion Detection	<ul style="list-style-type: none"> • Sensitivity: 100 levels for each channel • Area: Programmable individually
Event Log	Up to the 10,000 events (sensor, motion, video loss, power on, remote login, logout, HDD error, HDD full)
Languages	Multi-language
Camera Titles	Multi-language
USB Keyboard and Mouse	Yes
Touch Panel	Touch panel LCD monitor (USB interface, EETI chipset only)
Remote Controller	IR remote control
System Upgrade	iWatch DVR, USB flash drive
Pan/Tilt/Zoom Control	RS-485 interface (Pelco P, Pelco D, Samsung, LG, LiLin)

*Design and specifications are subject to change without prior notice.

TSAT0200

SD-SDI/HD-SDI/3G-SDI to HDMI Converter



Model	TSAT0200
Audio Format	HDMI with embedded audio
Re-clocking Function	Yes
Extension Spec	400 m (1312 ft) (SD-SDI), 200 m (656 ft) (HD-SDI), 140 m (459 ft) (3G-SDI) with Belden 1694 cable
Input Power	5 V to 24 V DC, locking power connector (power adaptor optional)
Dimensions (W × H × L)	120 mm × 57 mm × 36 mm (4.72 in × 2.24 in × 1.42 in)
Weight	0.2 kg (0.44 lb)
Enclosure	Metal
Operating Ambient Temperature	0 °C to 70 °C (32 °F to 158 °F)
Relative Humidity Storage Temperature	10 % to 85 % noncondensing -20 °C to 80 °C (-4 °F to 176 °F)
Storage Humidity	5 % to 95 % noncondensing
Power Consumption	Maximum 10 W

*Design and specifications are subject to change without prior notice.

Features

- SD-SDI/HD-SDI/3G-SDI to HDMI
- Full HDMI support including embedded audio
- Supports SMPTE-259M, SMPTE-292M, SMPTE-424M, SMPTE-425M protocols
- Equalized looping SD-SDI/HD-SDI/3G-SDI output
- Maximum cable length (Belden 1694): 400 m (1312 ft) (SD-SDI), 200 m (656 ft) (HD-SDI), 140 m (459 ft) (3G-SDI)

Tech Specs

Model	TSAT0200
Frequency Bandwidth	165 MHz
Input	BNC (SD-SDI/HD-SDI/3G-SDI) × 1
Output	<ul style="list-style-type: none"> • HDMI × 1 • BNC (SD-SDI/HD-SDI/3G-SDI) × 1
Supported Protocols	SMPTE-259M, SMPTE-292M, SMPTE-424M, SMPTE-425M
Video Format	<ul style="list-style-type: none"> • SD-SDI: <ul style="list-style-type: none"> ◦ 525i at 59.94 frames per second ◦ 625i at 50 frames per second • HD-SDI: <ul style="list-style-type: none"> ◦ 720p at 23.98/24/25/29.97/30 frames per second ◦ 720i at 50/59.94/60 frames per second ◦ 1080i at 50/59.94/60 frames per second ◦ 1080p at 23.98/24/25/29.97/30 frames per second • 3G-SDI: <ul style="list-style-type: none"> ◦ 1080p at 50/59.94/60 frames per second
Video Bandwidth	-
Data Rate	-
Output Impedance	75 ohm

TSAT0300

SD-SDI/HD-SDI/3G-SDI to HDMI and CVBS Converter



Model	TSAT0300
Data Rate	-
Output Impedance	75 ohm
Audio Format	HDMI with embedded audio
Re-clocking Function	Yes
Extension Spec	400 m (1312 ft) (SD-SDI), 200 m (656 ft) (HD-SDI), 140 m (459 ft) (3G-SDI) with Belden 1694 cable
Input Power	5 V to 24 V DC, locking power connector (power adaptor optional)
Dimensions (W × H × L)	156 mm × 120 mm × 36 mm (6.14 in × 4.72 in × 1.42 in)
Weight	0.2 kg (0.44 lb)
Enclosure	Metal
Operating Ambient Temperature	0 °C to 70 °C (32 °F to 158 °F)
Relative Humidity	10 % to 85 % noncondensing
Storage Temperature	-20 °C to 80 °C (-4 °F to 176 °F)
Storage Humidity	5 % to 95 % noncondensing
Power Consumption	Maximum 10 W

*Design and specifications are subject to change without prior notice.

Features

- SD-SDI/HD-SDI/3G-SDI to HDMI and CVBS
- Full HDMI support including embedded audio
- Supports SMPTE-259M, SMPTE-292M, SMPTE-424M, SMPTE-425M protocols
- Equalized looping SD-SDI/HD-SDI/3G-SDI output
- Maximum cable length (Belden 1694): 400 m (1312 ft) (SD-SDI), 200 m (656 ft) (HD-SDI), 140 m (459 ft) (3G-SDI)

Tech Specs

Model	TSAT0300
Frequency Bandwidth	165 MHz
Input	BNC (SD-SDI/HD-SDI/3G-SDI) × 1
Output	<ul style="list-style-type: none"> • HDMI × 1 • BNC (SD-SDI/HD-SDI/3G-SDI) × 1 • CVBS (PAL/NTSC auto detection) × 1
Supported Protocols	-
Video Format	<ul style="list-style-type: none"> • SD-SDI: <ul style="list-style-type: none"> ◦ 525i at 59.94 frames per second ◦ 625i at 50 frames per second • HD-SDI: <ul style="list-style-type: none"> ◦ 720p at 23.98/24/25/29.97/30 frames per second ◦ 720i at 50/59.94/60 frames per second ◦ 1080i at 50/59.94/60 frames per second ◦ 1080p at 23.98/24/25/29.97/30 frames per second • 3G-SDI: <ul style="list-style-type: none"> ◦ 1080p at 50/59.94/60 frames per second
Video Bandwidth	-

TSAT0400

1 to 2 SD-SDI/HD-SDI/3G-SDI Distribution Amplifier/Repeater



Model	TSAT0400
Data Rate	270/1483/1485 Mbps
Output Impedance	75 ohm
Audio Format	-
Re-clocking Function	-
Extension Spec	400 m (1312 ft) (SD-SDI), 200 m (656 ft) (HD-SDI), 140 m (459 ft) (3G-SDI) with Belden 1694 cable
Input Power	5 V DC, 1.5 A (power adaptor optional)
Dimensions (W × H × L)	145 mm × 80 mm × 25 mm (5.71 in × 3.15 in × 0.98 in)
Weight	0.3 kg (0.66 lb)
Enclosure	Metal
Operating Ambient Temperature	0 °C to 70 °C (32 °F to 158 °F)
Relative Humidity	10 % to 85 % noncondensing
Storage Temperature	-20 °C to 80 °C (-4 °F to 176 °F)
Storage Humidity	5 % to 95 % noncondensing
Power Consumption	Maximum 4 W

*Design and specifications are subject to change without prior notice.

Features

- Compact 1 to 2 equalizing SD-SDI/HD-SDI/3G-SDI distribution amplifier
- Data rates: 270/1483/1485 Mbps
- Supports SMPTE-259M, SMPTE-292M, SMPTE-296M, SMPTE-344M protocols
- 2 separately buffered outputs
- Cable equalization (Belden 1694)
- Maximum cable length (Belden 1694): 400 m (1312 ft) (SD-SDI), 200 m (656 ft) (HD-SDI), 140 m (459 ft) (3G-SDI)
- Bi-color LED indication of input lock and rate

Tech Specs

Model	TSAT0400
Frequency Bandwidth	-
Input	BNC (SD-SDI/HD-SDI/3G-SDI) × 1
Output	BNC (SD-SDI/HD-SDI/3G-SDI) × 2
Supported Protocols	SMPTE-259M, SMPTE-292M, SMPTE-424M, SMPTE-425M
Video Format	<ul style="list-style-type: none"> • SD-SDI: <ul style="list-style-type: none"> ◦ 525i at 59.94 frames per second ◦ 625i at 50 frames per second • HD-SDI: <ul style="list-style-type: none"> ◦ 720p at 23.98/24/25/29.97/30 frames per second ◦ 720i at 50/59.94/60 frames per second ◦ 1080i at 50/59.94/60 frames per second ◦ 1080p at 23.98/24/25/29.97/30 frames per second • 3G-SDI: <ul style="list-style-type: none"> ◦ 1080p at 50/59.94/60 frames per second
Video Bandwidth	2.97 Gbps and 2.97/1.001 Gbps

TSAT0500

1 to 2 SD-SDI/HD-SDI/3G-SDI Re-clocking Distribution Amplifier/Repeater



Model	TSAT0500
Output Impedance	75 ohm
Audio Format	-
Re-clocking Function	Yes
Extension Spec	Unlimited repeater connection
Input Power	5 V to 24 V DC, locking power connector (power adaptor optional)
Dimensions (W × H × L)	145 mm × 80 mm × 25 mm (5.71 in × 3.15 in × 0.98 in)
Weight	0.3 kg (0.66 lb)
Enclosure	Metal
Operating Ambient Temperature	0 °C to 70 °C (32 °F to 158 °F)
Relative Humidity	10 % to 85 % noncondensing
Storage Temperature	-20 °C to 80 °C (-4 °F to 176 °F)
Storage Humidity	5 % to 95 % noncondensing
Power Consumption	Maximum 4 W

*Design and specifications are subject to change without prior notice.

Features

- Compact 1 to 2 equalizing SD-SDI/HD-SDI/3G-SDI distribution amplifier
- Data rates: 270/1483/1485 Mbps
- Supports SMPTE-259M, SMPTE-292M, SMPTE-296M, SMPTE-344M protocols
- 2 separately buffered outputs
- Cable equalization (Belden 1694)
- Bi-color LED indication of input lock and rate
- Reclocking function capability and useful as a repeater

Tech Specs

Model	TSAT0500
Frequency Bandwidth	-
Input	BNC (SD-SDI/HD-SDI/3G-SDI) × 1
Output	BNC (SD-SDI/HD-SDI/3G-SDI) × 2
Supported Protocols	SMPTE-259M, SMPTE-292M
Video Format	<ul style="list-style-type: none"> • SD-SDI: <ul style="list-style-type: none"> ◦ 525i at 59.94 frames per second ◦ 625i at 50 frames per second • HD-SDI: <ul style="list-style-type: none"> ◦ 720p at 23.98/24/25/29.97/30 frames per second ◦ 720i at 50/59.94/60 frames per second ◦ 1080i at 50/59.94/60 frames per second ◦ 1080p at 23.98/24/25/29.97/30 frames per second • 3G-SDI: <ul style="list-style-type: none"> ◦ 1080p at 50/59.94/60 frames per second
Video Bandwidth	2.97 Gbps and 2.97/1.001 Gbps
Data Rate	270/1483/1485 Mbps

TSAT0600

1 to 4 SD-SDI/HD-SDI/3G-SDI Distribution Amplifier/Repeater



Model	TSAT0600
Video Bandwidth	2.97 Gbps and 2.97/1.001 Gbps
Data Rate	270/1485/2970 Mbps
Output Impedance	75 ohm
Audio Format	-
Re-clocking Function	Yes
Extension Spec	400 m (1312 ft) (SD-SDI), 200 m (656 ft) (HD-SDI), 140 m (459 ft) (3G-SDI) with Belden 1694 cable
Input Power	5 V to 24 V DC, locking power connector (power adaptor optional)
Dimensions (W × H × L)	145 mm × 80 mm × 25 mm (5.71 in × 3.15 in × 0.98 in)
Weight	0.3 kg (0.66 lb)
Enclosure	Metal
Operating Ambient Temperature	0 °C to 70 °C (32 °F to 158 °F)
Relative Humidity	10 % to 85 % noncondensing
Storage Temperature	-20 °C to 80 °C (-4 °F to 176 °F)
Storage Humidity	5 % to 95 % noncondensing
Power Consumption	Maximum 10 W

*Design and specifications are subject to change without prior notice.

Features

- Compact 1 to 4 equalizing SD-SDI/HD-SDI/3G-SDI distribution amplifier
- Data rates: 270/1483/2970 Mbps
- Supports SMPTE-259M, SMPTE-292M, SMPTE-424M, ITU-R BT.601, ITU-R BT.1120 protocols
- 4 separately buffered outputs
- Full HD video format
- Cable equalization (Belden 1694)
- Maximum cable length (Belden 1694): 400 m (1312 ft) (SD-SDI), 200 m (656 ft) (HD-SDI), 140 m (459 ft) (3G-SDI)
- Bi-color LED indication of input lock and rate

Tech Specs

Model	TSAT0600
Frequency Bandwidth	-
Input	BNC (SD-SDI/HD-SDI/3G-SDI) × 1
Output	BNC (SD-SDI/HD-SDI/3G-SDI) × 4
Supported Protocols	SMPTE-259M, SMPTE-292M, SMPTE-424M, ITU-R BT.601, ITU-R BT.1120
Video Format	<ul style="list-style-type: none"> • SD-SDI: <ul style="list-style-type: none"> ◦ 525i at 59.94 frames per second ◦ 625i at 50 frames per second • HD-SDI: <ul style="list-style-type: none"> ◦ 720p at 23.98/24/25/29.97/30 frames per second ◦ 720i at 50/59.94/60 frames per second ◦ 1080i at 50/59.94/60 frames per second ◦ 1080p at 23.98/24/25/29.97/30 frames per second • 3G-SDI: <ul style="list-style-type: none"> ◦ 1080p at 50/59.94/60 frames per second