

Specifications

GSS 100

Video input

Number/signal type	1 VGA-UXGA RGBHV, RGBS pass-through
Connectors	5 female BNC
Nominal level	0.7 Vp-p for RGB
Minimum/maximum levels.....	Analog: 0.3 V to 1.5 Vp-p with no offset
Impedance	75 ohms
Horizontal frequency	15 kHz to 145 kHz
Vertical frequency.....	30 Hz to 170 Hz
Return loss	<-42 dB @ 5 MHz
DC offset (max. allowable)	1.5 V

Video output

Number/signal type	1 VGA-SXGA+ RGBHV, RGBS (selectable for stored images, follows input type for pass-through input)
Connectors	5 BNC female
Nominal level	0.7 Vp-p for RGB
Minimum/maximum levels.....	0 V to 0.7 Vp-p (unity gain of pass-through input)
Impedance	75 ohms
Vertical frequencies	50 Hz, 60 Hz, 72 Hz, 96 Hz, 100 Hz, 120 Hz
Output resolutions	640x480 ^{1,2,3,4,5,6} , 800x600 ^{1,2,3,4,5,6} , 852x480 ^{1,2,3,4,5} , 1024x768 ^{1,2,3,4} , 1024x852 ^{1,2,3,4} , 1024x1024 ^{1,2,3} , 1280x768 ^{1,2} , 1280x800 ^{1,2} , 1280x1024 ^{1,2} , 1360x765 ^{1,2} , 1365x768 ^{1,2} , 1365x1024 ^{1,2} , 1366x768 ^{1,2} , 1400 x 1050 ^{1,2} , 1440x900 ^{1,2} HDTV: 480p ^{1,2} , 576p ^{1,2} , 720p ^{1,2} , and 1080i ^{1,2} , 1080p ^{1,2} ¹ = at 50 Hz, ² = at 60, Hz ³ = at 72 Hz, ⁴ = at 96 Hz, ⁵ = 100 Hz, ⁶ = 120 Hz

NOTE: For the output resolutions listed below, the total pixel and active pixel values are reduced:
1080i: 1440x1080 active pixels
1080p: 1440x1080 active pixels
The sync timings and line widths are correct and most displays recognize the rate correctly. Image files should be compressed to 1440x1080 to fill the entire video raster.

Return loss	-43 dB @ 5 MHz
DC offset	±5 mV with input at 0 offset

Sync

Input type	RGBHV, RGBS
Output type	RGBHV, RGBS
Input level	1.5 V to 5.0 Vp-p
Output level	TTL: 4.5 Vp-p, unterminated
Input impedance	510 ohms
Output impedance	75 ohms
Max. input voltage	5.0 Vp-p
Max. propagation delay.....	20 ns
Polarity.....	Selectable

File loading times

File Loading Times (in seconds)		
File Type	Using the Front Panel	Using SIS™ or Web Pages
640 x 480 resolution		
Bitmap (BMP) file	2.0	4.5
JPEG (189 KB) file	1.5	2.5
JPEG (20 KB) file	1.5	2.0
1024 x 768 resolution		
Bitmap (BMP) file	5.5	6.5
JPEG 100% (651 KB) file	3.5	6.5
JPEG 75% (157 KB) file	2.5	5.0
1400 x 1050 resolution		
Bitmap (BMP) file	8.0	9.0
JPEG 100% (702 KB) file	5.5	10.0
JPEG 75% (181 KB) file	4.5	9.0

Memory and image storage

Internal memory..... 16 MB

Image storage memory requirements

BMP Images Available	Total Megabytes of Memory Required at Specific Resolutions				
	640 x 480	800 x 600	1024 x 768	1280 x 1024	1400 x 1050
1	0.9 MB	1.4 MB	2.4 MB	3.9 MB	4.4 MB
2	1.8 MB	2.9 MB	4.7 MB	7.8 MB	8.8 MB
3	2.8 MB	4.3 MB	7.1 MB	11.8 MB	13.2 MB
4	3.7 MB	5.8 MB	9.4 MB	15.7 MB	
5	4.6 MB	7.2 MB	11.8 MB		
6	5.5 MB	8.6 MB	14.2 MB		
7	6.5 MB	10.1 MB			
8	7.4 MB	11.5 MB			
9	8.3 MB	12.9 MB			
10	9.2 MB	14.4 MB			
11	10.1 MB	15.8 MB			
17	15.7 MB				

NOTE: JPEG image storage is highly variable and is based on file size. To calculate the total number of JPEG images you can store, divide 16 MB by the JPEG file size. For example, 16 MB ÷ 500 KB (0.5 MB) = 32 images.

Control/remote — video processor

Serial control port.....	RS-232, 9-pin female D connector
Baud rate and protocol.....	2400 to 115200 baud (configurable) Default settings (adjustable: 9600 baud; 8 data bits; 1 stop bit; no parity)
Serial control pin configurations	2 = Tx, 3 = Rx, 5 = GND
Ethernet control port.....	1 RJ-45 female connector
Ethernet data rate	10/100Base-T, half and full duplex with autodetect
Ethernet protocol	ARP, ICMP (ping), IP, TCP, DHCP, Telnet
Ethernet default settings	Link speed and duplex level = autodetected IP address = 192.168.254.254, subnet mask = 255.255.0.0, default gateway = 0.0.0.0 DHCP = off
Program control	Extron's Simple Instruction Set (SIS™) Microsoft® Internet Explorer®, Telnet

General

Power	100 VAC to 240 VAC, 50/60 Hz, 30 watts, internal
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +113 °F (0 to +45 °C) / 10% to 90%, noncondensing
Cooling	Convection, no vents
Mounting	
Rack mount	Yes, with optional 1U rack shelf
Furniture mount	Yes, with optional brackets
Enclosure type	Metal
Enclosure dimensions	1.75" H x 8.75" W x 9.5" D (1U high, half rack wide) (4.4 cm H x 22.2 cm W x 24.1cm D) (Depth excludes connectors and knobs.)
Product weight.....	4.5 lbs (2.1 kg)
Shipping weight.....	7 lbs (4 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI
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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