

SM101 Program Rating Monitor

Standard Definition NTSC EIA-608B monitor used to display V-Chip Ratings that have been encoded into a video signal.

The SM101 Program Rating Monitor displays the Program Rating packet information encoded in the Line 21, Field 2 Extended Data Services (XDS) data channel. This monitor provides continuous verification of V-Chip Blocking codes. The Monitor Video outputs contain an On Screen Display (OSD) of the XDS data. The SM101 displays key Current Class and Channel Class packets if they are being transmitted. The front panel LEDs show Video present and Program Rating data present. The monitor display shows the rating in large letters to emphasize the Program Rating packet contents for rapid identification. INVALID RATING is displayed when there is no Program Rating packet being sent or if the recovered packet contains an invalid rating.

INPUT VIDEO CHARACTERISTICS

Video Input Level	1.0 Vp-p nominal
Video Input Variation	0.7 to 1.4 Vp-p
Input Impedance	75 Ohms
Input Return Loss	>35dB to 5MHz with external load having a 40dB return loss
Input Signal-To-Random	Functions to 25dB ratio (CCIR Noise Ratio weighted) with typically one error per row at that level

OUTPUT VIDEO CHARACTERISTICS

Video Outputs	2 provided
Video Output Level	1.0 Vp-p nominal
Video Output Variation	0.7 to 1.4 Vp-p
Insertion Gain	Unity \pm 0.5%
Output Impedance	75 Ohms nominal
Output Return Loss	30dB to 5MHz
Output DC Level	0V \pm 50mV at back porch
Clamp Type	Keyed back porch
Frequency Response	\pm 0.1 dB, 50KHz to 5 MHz +0.1 dB; -0.5 dB 5 MHz to 8 MHz
Line Tilt	Less than 1%
Field Tilt	Less than 1%
Signal-To-Random Noise Ratio	65 dB or greater CCIR weighting
Spurious Signals	-60 dB down up to 5 MHz, - 40 dB down above 5 MHz
Character Video	90 Units (adjustable)
Character Background Level	10 Units (adjustable)

FRONT PANEL DISPLAYS

Power (On-Off)	Push-button power switch with reset. White bar indicates status.
Power	LED lights to indicator power on and CPU status.
Video	LED indicates presence of proper video signal.
Data	LED indicates presence of valid Program Rating Packet.

REAR PANEL CONNECTORS

Video In	BNC connector for 75 Ohm video at 1 Vp-p nominal level.
Out 1 & 2	BNC connectors providing loop through video output
120 V 60 Hz Line Cord	Standard captive 3-wire line cord. 5 feet long.

PHYSICAL CHARACTERISTICS

Height	1.75 inches (4.45 cm)
Width	19 inches (48.3 cm)
Depth	5 1/4 inches (13.3 cm)
Mounting	Designed for rack mounting.
Weight	3 lbs. (1.36 kg)
Operating Ambient	0 C to +50 C

POWER REQUIREMENTS

Line Frequency	47-440 Hz
Line Voltage	117 VAC +/- 10%
Line Current	0.07 A maximum
Input Power	10 W maximum
Circuit Breaker	0.1 A trip current. In Power On/Off switch.