

# SPG-100

## STATIC PSIP GENERATOR



### Performance

The SPG-100 is a Static PSIP Generator that generates the PSIP Tables required by the ATSC. The ATSC requires that every digital transport stream in terrestrial broadcasting includes STT, RRT, VCT, MGT and the first four Event Information Tables (EIT-0, EIT-2, EIT-2, EIT-3.)

The main features of the SPG-100 are as follows:

- Generates STT, RRT, VCT, MGT and four static EIT
- At power-up, the unit automatically generates PSIP tables based on information stored in its memory
- Allows user to create information for the VCT and update the transport stream ID in the PAT, via RS232
- Creates and stores virtual channel information for up to six program streams
- RF Channels 2-69, SMPTE-310M and DVB-ASI inputs
- 1 SMPTE-310M and 2 DVB-ASI outputs
- Converts an 8-VSB signal to DVB-ASI and SMPTE-310M
- I.F. and DVB-ASI Front Panel Test points
- Null Packet Insertion and PCR Correction
- Loss of Transport Stream Alarm
- RS232 Control User Interface
- 1 RU mountable rack

## Specifications

General	Specification	Comments
<b>AC Power</b>		
Frequency	47-63 Hz	
Voltage	90-264V	
Current	1.2A max	
Fuse	1.5 A, 250V	
<b>Operating Conditions</b>		
Temperature	0°-50°C	
Altitude	8,000 ft.	Max
Humidity	95%	Non-condensing
Cooling	fan	Forced Convection
<b>Weight</b>		
Net	20 lbs.	
Gross	24 lbs.	Shipping weight
<b>Dimensions</b>		
Height	1.75"	
Width	19"	
Depth	18"	
<b>RS232 Settings</b>		
Baud Rate	9600	
Data Bits	8	
Parity	None	
Stop Bits	1	
Flo Control	None	

### RF Input Specifications

	Specification	Comments
Frequency	57.0-803.0 MHz	
USA Channel Numbers	2-69	
Impedance	75 ohms	
Connector	F	
RF Band	6.0 MHz	

### Demodulator

Parameter	Specification	Comments
Mode	8-VSB Terrestrial	
Equalizer Span	-5.9µS to +40µS	
Data Rate	19.392658 Mbps	
SNR Threshold	15dB	

### SMPTE310M Serial Interface (Baseband Data Input/Output)

Parameter	Specification	Comments
Connector	BNC	
Source Impedance	75 ohms	
Output Coupling	AC	AC inductively coupled
Signal Overshoot	<10%	
Data Format	Biphase Mark Coding	
Transport Stream Bit Rate	19.39265 Mbps	Raw serial data rate ± 2.8 ppm

### DVB-ASI Serial Interface (Baseband Data Input/Output)

Parameter	Specification	Comments
Connector	BNC	
Source Impedance	75 ohms	
Output Coupling	AC	AC inductively coupled
Transport Stream Bit Rate (input)	2.6 Mbps Min 19.39265 Mbps Max	
Transport Stream Bit-Rate (output)	19.39265 Mbps	

### PSIP Generator

Parameter	Specification	Comments
Inserted into the MPEG2 Stream	STT, RRT, VCT, MGT and four static EIT	
Configurable Parameters in VCT	Station ID Major Channel Number Minor Channel Number Modulation Mode Carrier Frequency Channel TSID	
Configurable parameter in MPEG2 PAT	Transport Stream ID	

### Ordering Information

Part Number	Description
SPG-100	Static PSIP Generator

Additional Information at KTech Web Site: [www.ktechtelecom.com](http://www.ktechtelecom.com)  
For Pricing and Delivery information: [sales@ktechtelecom.com](mailto:sales@ktechtelecom.com)

