



WG-100, Test Pattern generator Module

**PAL, NTSC, SECAM and all substandards
Teletext, Closed captions, VPS
All Analog Video Outputs, Audio Interface
Programmable Patterns And Test Signals
Motion Simulator
Digital Video Generator (ITU-BT.601/656)
RS-232 Port, I2C and SPI Control Interface
Open for large grade of customization!**

**Optional Video Input System
Teletext, VPS or Closed Captions Insertion
Lost Signal Detection
(automatically switched to pattern)**

1. Technical specification

Display	No built in display
Control Interface	RS-232, I2C and SPI
Setup	Internal memory for 40 configurations
TV standards Picture format TV lines count Scanning Colour subcarrier	PAL, NTSC, SECAM and all substandards 4/3, 14/9, 16/9 625/ 50 Hz, 525/ 60 Hz Interlaced, non-interlaced According to PAL, SECAM or NTSC standard Non-standard frequency support (defined by user, 8 types)
Teletext	Enhanced teletext (ETS300706, 6.9375 Mb/s), Tool for teletext design World Standard Teletext (WST, 5.7272 Mb/s) North-American BroadcastText System (NABTS, 5.7272 Mb/s)
Closed caption Wide screen signalling VPS	Line 21, EIA-608, 2 bytes per field, both 50/60 Hz systems, programmable Line 23, EN-300294 Line 16, ETS-300231, 40 bits programmable
Test patterns	Primary patterns (suitable for all TV systems) & Extended patterns (specific) 128 or more default test patterns (limited by installed memory only) All patterns can be modified by user, Tool for pattern design
Motion patterns	Motion simulation (horizontal pattern moving, speed from slow to fast)
Generation method	TRUE PICTURE technology (max.TV system resolution)
Inputs & Outputs CVBS (Video) S-Video Y (luminance) CHROMA (chrominance) R (red) G (green) B (blue) C _R , Y, C _B Sync Audio Digital Video Output PC Interface	75 ohm, level 1,2 Vpp (colour bars 100/0/100/0), level 1 Vpp (colour bars 75/0/75/0) 75 ohm, level 1 Vpp (colour bars 100/0/100/0) 75 ohm, level 0,6 Vpp (colour bars 100/0/100/0) 75 ohm, level 0,7 Vpp (colour bars 100/0/100/0) 75 ohm, level 0,7 Vpp (colour bars 100/0/100/0) 75 ohm, level 0,7 Vpp (colour bars 100/0/100/0) RGB outputs can be switched to color difference mode, levels are adjustable Composite sync (typ. 1Vpp on CVBS output), H and V pulses (LVTTTL 3.3V) 2 audio outputs, 1 & 3 kHz, Sine Wave (typ. 1.1Vrms/10k) 8 bit data stream output, 4:2:2 format, parallel according to ITU-BT.656/601 Additional signals (H and V sync, data clock), LVTTTL 3.3V RS-232
Power supply	5 - 7V/ max. 1 A (dependent on configuration)
Dimensions	165 x 99 [mm], 6.5 x 3.9 [inch]
Weight	Typ. 280g (dependent on configuration)

Notes

Epsilon
The World of Electronics

www.epsilon.com

Fax: (+420) 284862414

P.O. Box 43, Konevova 223, 130 04 Prague 3
Czech Republic, EU