

TDG7 Teletext Data Generator PAL, SDI & DVB-ASI



Robust hardware with dual power supply option on 2U models



The TDG7 is a highly reliable Teletext Data Generator designed for Vertical Blanking Interval (VBI) data insertion onto a PAL, SDI or DVB-ASI signal. It is part of the PLASMA family of teletext products and is designed for control and command via TCP/IP using SysMedia's WinSPRITE teletext editing and control software or as part of a complete PLASMA teletext system.

The unit is supplied as a rack-mount Linux PC (fitted with a more reliable flash memory disk rather than a conventional hard disk) containing one or more SysMedia InSERT-7 card(s) – a combined teletext carousel and VBI data inserter. A 2U chassis is supplied as standard supporting up to 3 output cards; a 1U version containing a single card is also available.

- Fully compliant with ETS 300706 teletext standard
- Supports all teletext packet formats including subtitles, data broadcast, PDC, EPG and enhanced teletext
- Line 21, widescreen signalling, and VPS insertion options
- PAL, SDI and DVB-ASI versions
- Single or multi-channel configurations
- 19" rack mount Linux PC
- Battery backed RAM for page storage
- Automatic bypass
- Separate monitoring output
- Automatic DVB-ASI data polarity sensing



Technical specifications

Teletext capabilities	World System Teletext, 625 line, ETS 300706, CCIR Teletext System B, level 1, 1.5 or 2.5 28 language character sets available with extended language control via x26 / x28 fully supported Maximum 32 data lines in VBI range 7 to 22 & 320-335, lines can also be blanked if required Serial or parallel mode transmission with multiple output streams User defined teletext header strings for each stream Header control bits fully supported FLOF (FASTEXT) and TOP PDC packet 8/30 format II support	
Page management	Page create, update (row adaptive), replace and delete Include or exclude pages in transmission Up to 99 sub-pages in each multi-page set Automatic multi-page set numbering (e.g. 1/5, etc) on user defined row Adjustable page display rate per page (in seconds or cycles) Out-of-sequence page transmission Immediate update / forced transmission of pages Decimal and hexadecimal page numbers Battery backed RAM for non-volatile page storage	
Subtitling	Up to 9 subtitle streams which can be assigned to any output stream Optional subtitle repeats Block, add-on and scrolling subtitles SysMedia TDG/SDO protocol via IP	
Command set	Extended SysMedia InSERT command set compatible with that used for TDG6 ; for control via WinSPRITE, TDG6 API or PLASMA Inserter Gateway	
Video I/O (PAL variant only)	Amplitude/Frequency Response 0-6MHz +/- 0.1dB Insertion Gain < 0.1 dB Luminance Non-Linearity < 0.2% Differential Gain < 0.15% Differential Phase < 0.1° Return loss 0-6 MHz > 32dB	Bar Tilt < 0.25% 2T Pulse/Bar ratio < 0.2% 2T Pulse K < 0.25% K Chrom-Lum Gain Inequality < 0.3% Chrom-Lum Delay Inequality < 2.0 nS Signal/Noise Ratio -66 dB
PC	Linux OS, flash disk, VGA graphics, 1 x 10/100 Base-T Ethernet, 2 x USB 1.1 (via front panel), 1 x PS2 with keyboard/mouse splitter (via front panel or rear)	
Temperature range	Operating 0–40°C / Storage -20–60°C	

Model range

Video Type	PAL	SDI	DVB-ASI
I/O (BNC)	PAL/SECAM composite *	270 Mbps SDI, EBU tech 3267, SMPTE 259M 800mV into 75 ohms *	DVB Transport Stream ASI to EN 50083-9 (no isolation)
Data format	EN 300 706	EN 300 706	EN 300 472 / EN 301 775
Bypass	Yes	Yes	n/a
Monitor	PAL	SDI	ASI

* Requires an input video signal (e.g. "black and burst"),
a suitable signal sync generator with cross-hatch test pattern is provided on PAL models.

Chassis	2U (standard)	1U (option)
Typical I/O configuration	Up to 3 x PAL or 2 x SDI or 2 x ASI or 1 each PAL, SDI & ASI	either PAL, SDI or ASI (1 only)
Power supply	100-264 VAC, 50-60Hz, option: dual (redundant) hot-swappable PSU	100-264 VAC, 50-60Hz, single PSU
Dimensions	2U: 482 x 88 x 450mm	1U: 482 x 44 x 500mm
Packed	62 x 58 x 21cm approx weight 16 kg	66 x 61 x 18 cm approx weight 11 kg