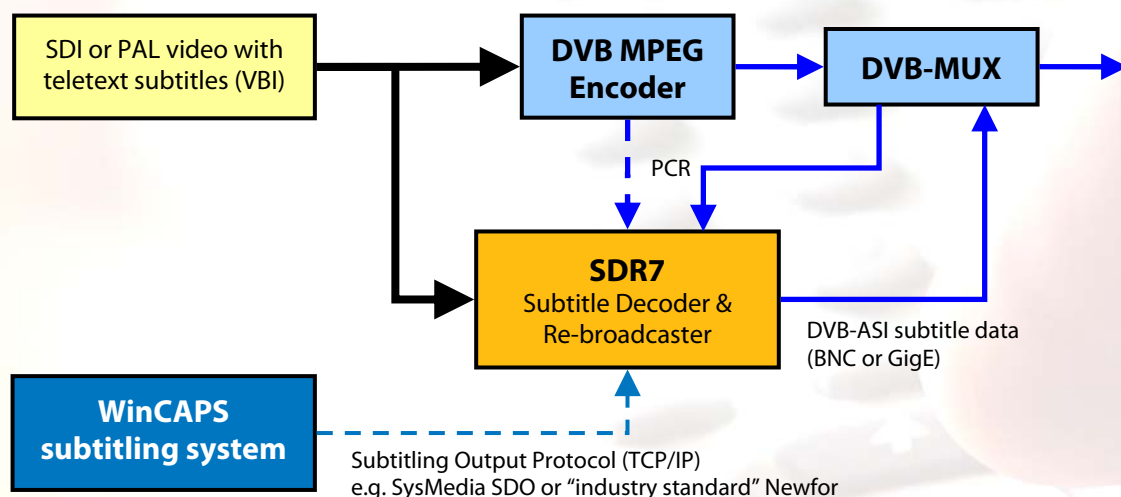


## SDR7 Teletext – DVB Subtitle Transcoder

SysMedia's SDR7 Teletext-DVB Subtitle Transcoder converts teletext subtitles in an SDI or analogue video feed to the equivalent DVB subtitles. It is available in two versions depending on the output type required – **SDR7-B** for DVB region based graphic bitmaps (EN 300 743) or **SDR7-T** for DVB teletext character output (EN 300 472).

The SDR is part of a family of SysMedia transmission products that includes the TDG teletext inserter and SDO subtitle inserter, used and trusted worldwide.

- **SIMPLE** – single unit fits easily into existing infrastructure
- **FLEXIBLE** – transcoder (VBI input) & inserter (IP protocol) in one unit
- **RELIABLE** – no hard drive, dual hot-swappable power supply option, Linux OS
- **EFFICIENT** – low bandwidth, minimum processing time



This convenient, self-contained package is designed to complement existing teletext subtitling systems and assist with a transition to DVB broadcasting - without the need to change existing subtitle authoring or transmission processes. The resulting DVB subtitles retain the text, colour, positioning and timing characteristics of the teletext originals.

For the EBU recommended DVB Subtitling (EN 300 473) the appearance of the output bitmap can be customised in font, size and surround as well as anti-alias level, with different parameter sets for scrolled and block-mode subtitles.

Adaptive anti-aliasing helps reduce the bandwidth requirement while maintaining quality. For scroll mode subtitles, only change data is transmitted along with vertical scrolling commands to reduce bandwidth further.

The SDR7 can also operate as a DVB Subtitling inserter in its own right by using its direct input protocol. This can be particularly useful for mixed operations with some programmes via VBI input from tape and others using playout from file.

- **Teletext subtitle decoding from VBI** composite or SDI video input
- **IP input via open protocol** for input from ProSTAR (or other automated subtitle playout system) or WinCAPS (for direct live subtitling)
- **Block and scroll mode subtitles**
- **DVB bitmap output** with user configurable font and style (option for DVB teletext output)
- **Web-browser interface for monitoring & configuration** input/output page number, VBI lines, status indication, fault logging



**Robust hardware** with dual power supply option on 2U models

## Technical specifications

VBI (video) input	Standard: PAL composite video (1 V pk-pk into 75 ohms +3 dB / -6 dB) Option: SDI – 270Mbps to EBU tech 3267, SMPTE 259M, 800mV into 75 ohms
Teletext subtitle extraction	World System Teletext, 625 line, ETS 300706, CCIR Teletext System B, level 1 or 1.5 Maximum 32 data lines in VBI range 7-22 & 320-335, serial or parallel transmission User configurable page number, block mode or scroll mode
Subtitle Format	Standard: DVB bitmap subtitles - region based graphic output to EN 300 743 using run length encoded bitmap images for block or scroll mode display. Scroll mode implementation (Stenographic subtitles) reduces bandwidth using progressive updates (i.e. add-on images restricted to changes only) with vertical scroll commands. Configurable font, size, surround/boxing and level of anti-aliasing (2/4/8 bits/pixel). Character/background colours and positioning according to input teletext coding.  Option: DVB Teletext subtitles - coding to EN 300 472 directly equivalent to input coding, user configurable output page number (which may differ from input page number) – display characteristics dependent on receiver.
DVB Transport Stream Input/Output	Standard: ASI to EN 50083-9 (no isolation) via BNC Option: Gigabit TS-over-IP
Timecode synchronization	PCR extraction via DVB input to EN 50083-9 (from MUX or DVB encoder) offset by user configurable period (corresponding to encoder delay) to generate PTS
IP subtitle input	TCP Newfor/SysMedia TDG/SDO protocol
Configuration and monitoring	All monitoring and configuration is performed via a web browser interface over TCP/IP connection or local monitor, mouse & keyboard.  Configuration includes: selection of monitored VBI lines, page number, live subtitling protocol and conflict resolution, PID, PCR/PTS offset (encoding/mux delay), and timeout.  Monitoring information includes: current status (video input, PCR input, system), page number & detected VBI lines, block/scroll mode, current subtitle, fault log
Fault behaviour	All fault conditions are logged with time and date Loss of input video signal – automatic subtitle clear transmitted after user configurable time-out with user configurable optional apology message; automatic resumption of normal operation as soon as valid page data is received  Loss of input ASI signal – loss of PCR for more than a few seconds causes service interruption; automatic resumption of normal operation when PCR is received  Loss of power – full automatic system restoration approx 60 seconds after power is restored
PC specification (minimum)	Linux OS, Pentium 4 2.4GHz processor, 256MB RAM, 2GB flash 'disk', VGA graphics, DVD/CD-RW 1 x Gigabit NIC, min 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
Power supply	100-264 VAC, 50-60Hz Option: Dual (redundant) hot-swappable power supply (2U chassis only)
Size	Standard: 1U: 482 x 44 x 500mm (packed: 66 x 61 x 18 cm, approx weight 11 kg) Option: 2U: 482 x 88 x 450mm (packed: 62 x 58 x 21cm, approx weight 16 kg)