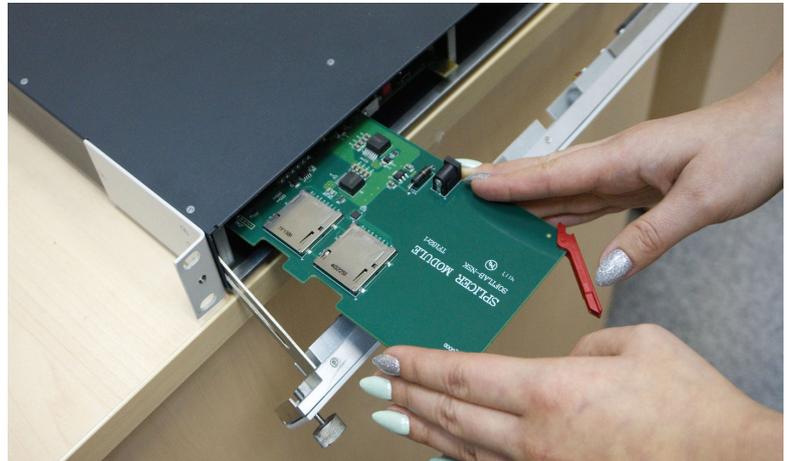




Main characteristics:

- Designed for seamless insertion of ads into a DVB-T2-MI transport stream. The insertion is performed using SCTE 118-3 standard schedules and in accordance with the SCTE 35 standard;
- Real time insertion process without transcoding the input signal;
- Splicer can deal with up to 10 programs transmitted via a DVB-T2-MI stream in MPLP mode;
- When local ads are inserted the structure and main parameters of the stream remain the same – the overall bitrate of the transport stream, the bitrate and structure of the physical levels (PLP), T2-MI TimeStamps, PSI/SI service data;
- Insertion occurs on the elementary stream level (PES), therefore there are no audio or video distortions in the other multiplex programs;
- The splicer uses the following interfaces:
 - ASI – to receive the incoming multiplex and to output the local version of the multiplex onto the transmitting equipment;
 - Ethernet – to transfer content that needs to be included to the splicer, to transfer report files onto the FTP server for controlling and monitoring;
- A compact server solution with the option of installing up to 4 splicing boards into one "PROFNEXT" 1U rack mount or up to 12 boards into a 3U rack;
- WEB interface for primary configuration and further monitoring.

A device for splicing local content into program transport streams according to the SCTE 35 standard



***.ts** media files, which are fragments of a MPEG transport stream, are used to locally insert ads into a federal multiplex. A file must contain both video and audio, as well as PMT and PAT tables. The prepared files (local ads) are stored on a FTP server.

While working, the splicer constantly accesses the FTP server, requesting the current state of the schedule and loaded files. The frequency of the requests is set using configuration files. The insertion schedule for each channel of each region must be updated on the FTP server no later than 10 hours before the start of a broadcasting day of the given channel of the given region.

The schedule is identified by its name, which is formed according to the SCTE 118-3 standards. The success of loading the schedule is determined by checking the information of the downloaded files using the MD5-hash algorithm. The same algorithm is used to check the relevance of the media files stored in the splicer memory.

When updating the schedule file, the splicer compares the list of stored files with the files that are planned to be inserted. If necessary, it automatically downloads the missing files from the FTP server.

The start/stop insertion commands are SCTE 35 cue messages contained within the transport stream. The splicer supports the ability to automatically select an advertising schedule if it has a unique identifier specified in the corresponding field. In other cases, when the cue message does not contain any indications of a specific ad block, the next ad block in the current time window is automatically inserted.

Two types of LOG files are created as the splicer works: status (report) and event (technical), which are constantly updated with information on the broadcast media files and equipment technical monitoring reports.

SNMPv2 Device Monitoring:

- An up-to-date schedule for the current and upcoming days;
- A media stream report;
- Availability of input/output streams;
- Changed stream parameters;
- Quality of the input and output stream (the number of errors at the given levels and priorities);
- Ethernet connectivity;
- Power supply, external/internal temperature;
- Available space on hard drive;
- SMART parameters of the hard drive;
- A Power Failure message on next startup.

Managing the device using WEB interface:

- Updating software version of device;
- Updating configuration file or program of device;
- Using new schedule file;
- Receiving status or event LOG file from device;
- Blocking or unblocking a SCTE 35 cue messages on device;
- Turning BYPASS mode of device on/off;
- Restarting the splicer;
- Instant shut down of splicer ad insertion.

Technical characteristics:

Input signal parameters:	
Number of programs	Up to 10 programs in separate PLP T2-MI streams or MPEG-2 MPTS
Video formats	MPEG-2/AVC/HEVC Standard Definition and High Definition. The clip video bitrate cannot exceed the program video bitrate
Audio formats	MPEG-1 Layer 2, MPEG-2 Layer 2, AAC, support of several audio tracks. The clip audio bitrate cannot exceed the program audio bitrate, the audio and video compression must match
Cue Message format	SCTE 35
Schedule format	SCTE 118-3
Insertion accuracy	frame by frame
Physical interfaces:	
Management	1 x Gigabit Ethernet
T2-MI/MPEG-TS	1 x ASI input, 1 x ASI output (BNC- 75 Ohm), power failure relay bypass, 1 x Gigabit Ethernet input, 1 x Gigabit Ethernet output (RJ-45)
Hard drive storage	up to 256 Gb SSD
Management and monitoring	WEB interface; SNMPv2 splicer network management and monitoring system
Power:	
Power supply	Standby, 100-240 V, alternating current (50 Hz)
Physical parameters:	
Form Factor	Rack mount, 19", 1U or 3U Rack contains built-in CPU. The configuration and monitoring of blocks can be done via the front control panel or via the WEB interface. Primary and backup (optional) power supplies. Two global reference clocks.
Dimensions / (WxHxD)	1U – 483x414x44 mm; 3U – 483x414x133 mm.