ProTelevision Technologies A/S Valhøjs Allé 176, 1st floor DK-2160 Rødovre, Denmark

## PROTELEVISION PT3150 ISDB-T/Tb MODULATOR REMUX SOFTWARE FUNCTIONALITY INTEGRATED.

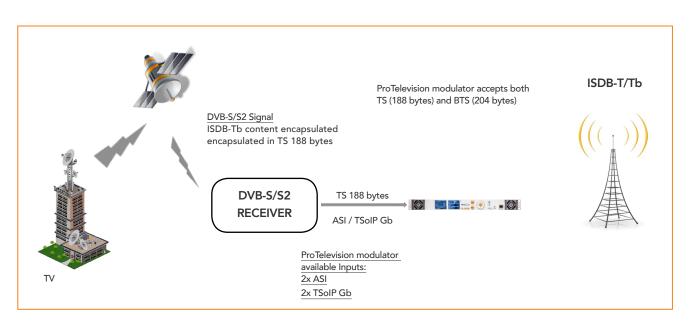
ProTelevision Technologies is releasing the REMUX Software functionality for their ISDB-T/Tb range of modulators

- ♦ ISDB-Tb REMUX software functionality for TV Stations with satellite reception
- Adaptation of TS 188 Bytes data into a BTS 204 signal
- Cost effective feature due to avoidance of additional equipment for BTS generation

The REMUX software feature is developed for the ISDB-Tb Broadcasters having transmission points based upon satellite reception. When a TS signal (ISO/IEC 13818) is received as input, the REMUX software performs an adaptation of the data to a BTS signal (ABNT NBR 15601).

When the satellite signal (DVB-S/S2) is received by the system, its received as TS (188 bytes). ProTelevision modulator will accept the TS signal and the REMUX SW feature will convert the data stream into the BTS (204 bytes) this will avoid the necessity of additional equipment for conversion.

## Generic system diagram



ProTelevision REMUX functionality is managed by ProTelevision's world known intuitive and user friendly WEB Graphical User Interface.

The REMUX functionality is a 100% software feature developed with the support and homologation from the Mackenzie Digital TV Research Laboratory. This will ensure continuous development of the product upon any future implementation in the ISDB-T/Tb standard.

ProTelevision's best in class development team, in co-operation with the top ISDB-Tb experts has gathered extensive expertise and knowledge in order to provide the ISDB-T/Tb Broadcaster the highest quality and future proof supported software.

## **Selected Features:**

Generate PSI/SI information compliance with ABNT 15602-3 and ABNT 15603 according with following table:

Table	Information
NIT	Virtual channel, Area code, Channel frequency, Network name, Broadcaster prefix and TS name.
PAT	PMT PID and Program Identifier.
PMT	Audio Stream Type, Video stream type, PCR and PID.
SDT	Service name, Service provider name, Running Status and EPG flag.
тот	UTC time, Time of change, Country code, Country region id, Local time offset and Next time offset.
BIT	Can use: Service List Descriptor, Extended Broadcaster Descriptor, SI Parameter Descriptor and Broadcast Name Descriptor.
PCR	18 PCR OFF-video, Correction and PID remapping.
PID	Re-mapping, Filtering and Monitoring.
PSI/SI	Adjustable Timing Interval.
IIP Insertion	The output (of the REMUX) is a Broadcast Transport Stream (BTS), with data rate of 32.507936507 Mb/s. The BTS stream comprises 204 bytes with Multiplex Position Information, and including ISDB-T_Information_Packets (IIP), according to ARIB STD-B31 Appendix 5.5 and ABNT 15601.

## Specifications highlights:

- Data Input: Both TS and BTS signals over ASI or over IP (2 available TSoIP 1Gb inputs);
- Clock Input: External 10MHz reference;
- Data Output: BTS 204-Byte packets 32.507936 Mb/s;
- Spectrum configuration: One, two or three layers, with or without partial reception;
- ◆ IFFT Size Mode: One (2048), Two (4096) or Three (8192);
- Modulation: QPSK, 16-QAM and 64-QAM;
- ◆ Time Guard Interval: 1/32, 1/16, 1/8 and 1/4;
- ♦ Time Interleave: 0,  $\approx 100$ ms,  $\approx 200$ ms y  $\approx 400$ ms;

Feel free to contact us for further queries.

The ProTelevision Technologies Team,

sales@protelevision.com +45 44 77 00 00 www.protelevision.com