

TT6000 MediaLink Professional Transport Stream Processors

Powerful and compact MPEG-2 media boundary crossing products



The TT6000 MediaLink family offers highly reliable products, designed to efficiently convert between different Transport Stream Media. The products in the TT6000 family meet the following requirements:

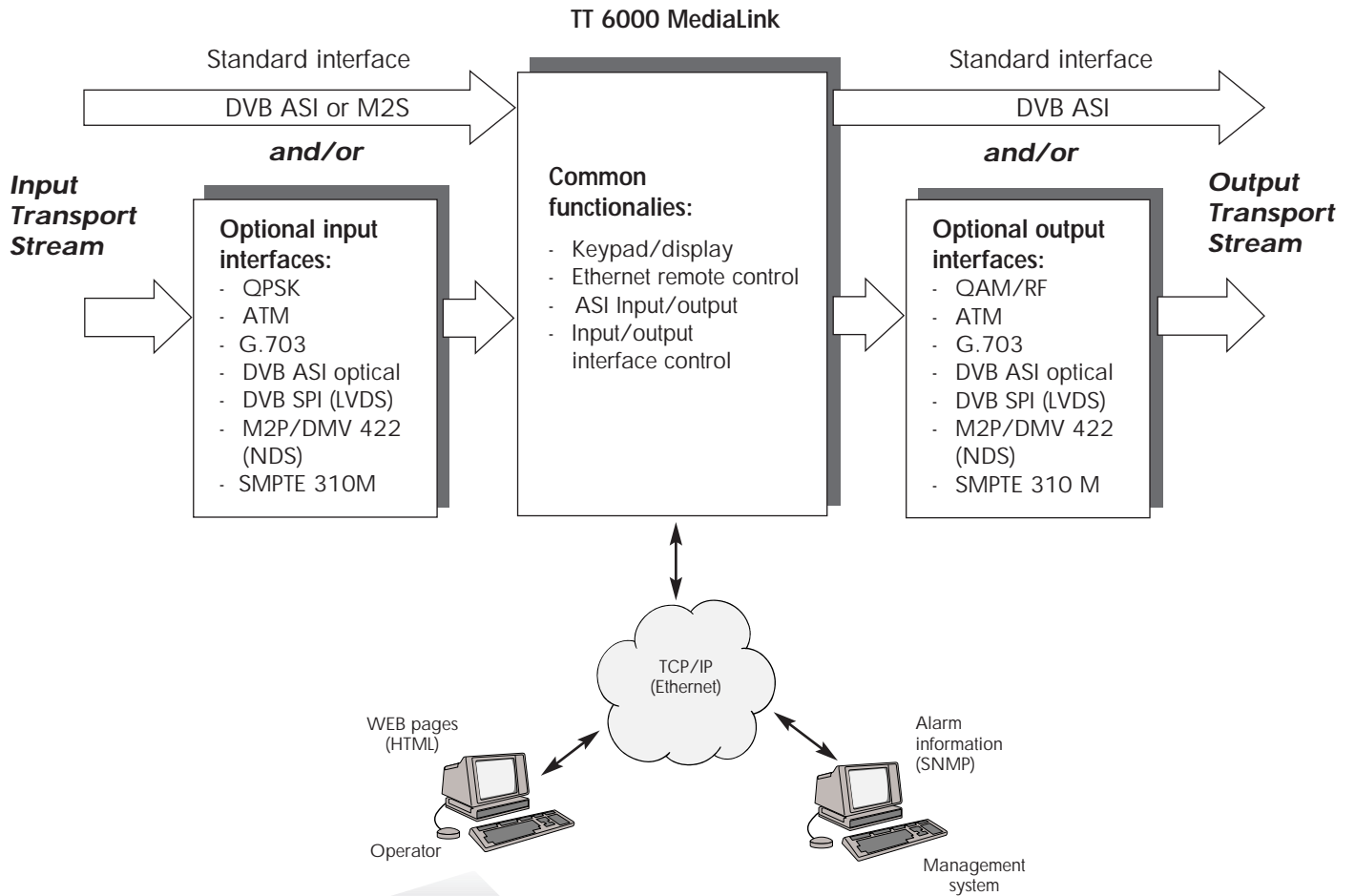
- **TT6010 MediaLink**
Supports all major industry standards. Optional features like PID filtering, PID remapping and PSI/SI insertion.
- **TT6020 MediaLink^{ex}**
This product has the same basic features as the MediaLink, but in addition it has the capacity of powerful TS processing, like Service

and PID filtering, PID remapping and dynamic regeneration of PSI/SI tables. SNMP control enables integration in centralized management systems.

- Supports all major satellite, cable and telecom interfaces
- Compact 1RU chassis
- Easy configuration via WEB browser or front panel keypad
- TCP/IP remote control enables centralised status monitoring and alarm handling



TT6000 - FUNCTIONALITY



TT6000 Management

Common management features for all TT6000 products:

- On-board WEB server allows you to configure and monitor the unit using an ordinary WEB browser. The user can connect to the unit over a TCP/IP network (Ethernet).
- SNMP control enables integration in centralised management applications (i.e. TANDBERG System Manager) and transfer of alarm messages to a network management center.
- Front panel and keypad for direct configuration.



WEB pages (HTML)

TT6010 MediaLink

MediaLink offers a wide range of different input and output formats that can be flexibly combined to suit many different application areas. It is the **key product** for **Regional Cable Head-Ends**, providing intelligent interface of digital TV signals from any distribution media out to your cable subscribers.

A WEB based alarm monitoring system enables you to view alarms from several MediaLinks connected to the same TCP/IP network, from one of the units.

There is one **optional feature** available, either as a factory default setting or to be ordered later by the customer as a SW upgrade.

Option: PID filtering and remapping, PSI/SI insertion

In most cases it is necessary to manipulate the contents of the TS at the Regional Head-End.

PID filtering and remapping:

PSI/SI information is often centrally transmitted from the Super Head-End and out to many different Regional Cable Head-Ends. The correct PSI/SI information has to be locally extracted from the TS, and remapped to the correct PID. A typical example could be to remap the correct NIT (tuning information for the Set Top Boxes), or similarly the Conditional Access information (EMM). Due to limited bandwidth on a cable network, it can also be necessary to filter out information from the TS which are not necessary, i.e. complete programs or information like language and CA descriptors.

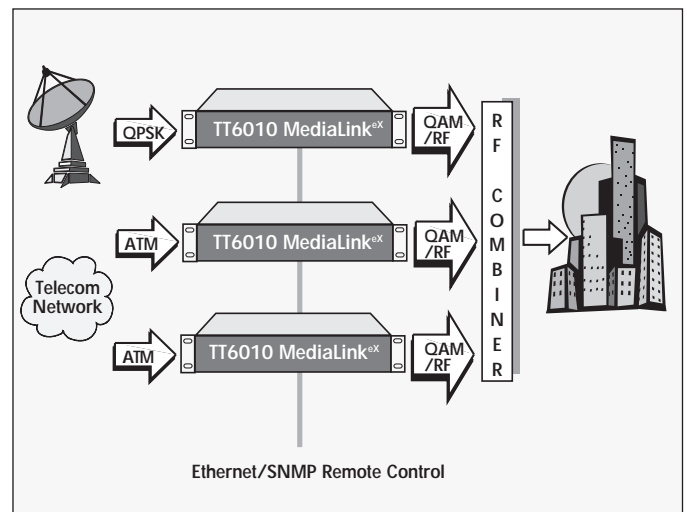
PSI/SI insertion:

In some applications, the PSI/SI information will be inserted locally at the Regional Cable Head End, like the NIT. All PSI/SI tables (except for EIT) can be locally replaced and inserted into the out-going TS. All PSI/SI information is built together by using the PSI/SI Editor program, and stored on a file. This is then down loaded from the WEB interface of the MediaLink.

TT6020 Medialink^{ex}

The MediaLink^{ex} has the same basic features as the MediaLink, but in addition it has the capability of performing advanced TS processing like Service and PID filtering, PID remapping and dynamically regeneration of the PSI/SI tables (except NIT and EIT). This means that you are able to filter out complete services with it's related PIDs in addition to individual PIDs, i.e. you don't have to know all the individual PIDs related to one service. Dynamic regeneration of PSI/SI tables provides you with automatically update of the PSI/SI information inserted into the outgoing TS when manipulating the contents of the incoming TS.

In addition to alarm monitoring through the WEB interface, the MediaLink^{ex} provides SNMP control for integration in a centralized management system.



Regional Cable Head-End

TANDBERG TT6000 - PRODUCT SPECIFICATIONS

Capabilities - TT6010 MediaLink

Format conversion between all major industry standards
Rate conversion by NULL Packet insertion and removal
PCR restamping
Automatic detection of input packet length
User control of output rate and packet length
Ethernet remote control interface
Configurable alarm handling
Automatic start up after power break
MPEG rate up to 60 Mbit/s
DVB ASI input and output available on all models
Optional features (SW upgradable):
- PID filtering and remapping, PSI/SI insertion (-EIT)
- Alarm monitoring and logging

Capabilities - TT6020 MediaLink^{ex}

Service and PID filtering
PID remapping
NIT insertion
Regeneration of PSI/SI tables (-NIT and EIT)
Replacement of PSI/SI tables
Format conversion between all major industry standards
Rate conversion by NULL Packet insertion and removal
PCR restamping
Automatic detection of input packet length
User control of output rate and packet length
Ethernet remote control interface
Configurable alarm handling
Automatic start up after power break
MPEG rate up to 54 Mbit/s
DVB ASI input and output available on all models

Miscellaneous

Input voltage: 110/240V AC
Cooling: integrated fans
Width: 483mm, 19 inch rack
Height: 44mm, 1RU
Depth (in rack): 370mm
Temperature: In operation: 0° to +45°C
Storage: +20°C to +70°C
Relative humidity: 5 - 95%

Input and Output interfaces available

Satellite:

QPSK demodulator
Carrier Frequency range:
950-2150 MHz
Symbol rate: 2-30.5 M

Cable:

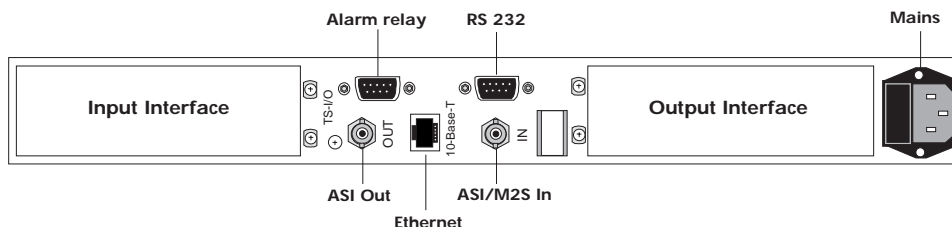
QAM modulator
16, 32, 64, 128 and 256 QAM
(Annex A, B)
IF: 36.15 MHz with 8 MHz BW,
43.75 or 44 MHz for 6 MHz BW
Optional RF up-converter:
300-470 MHz
470-606 MHz
606-862 MHz

Telecom:

G.703: 2, 6, 8, 34 and 45 Mbit/s (TTV Protocol)
34 (E3) and 45 (DS3) Mbit/s (DVB Protocol)
ATM: 34 and 45 Mbit/s AAL-1 (PDH)
155 Mbit/s AAL-5 electrical (SDH/SONET, STM-1)
155 Mbit/s AAL-5 optical, Single or
MultiMode (SDH/SONET, OC-3)
155 Mbit/s AAL-1 electrical (SDH/SONET, STM-1)
155 Mbit/s AAL-1 optical, Single or
MultiMode (SDH/SONET, OC-3)

Other:

DVB ASI optical
DVB SPI (LVDS)
M2S
M2P/DMV 422 (NDS)
SMPTE 310M



TANDBERG

Television

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