



TT4130 Transport Stream Analyzer

The TT4130 Transport Stream Analyzer combines advanced error detection and monitoring via a web interface in a 3RU multi-channel unit for MPEG-2, MPEG-4 and Windows Media® Video 9/VC-1 transport streams.

The TT4130 offers a compact multi-channel transport stream analyzer with a wide range of input interface options making it suitable for use in a range of markets: cable, satellite, terrestrial, mobile, distribution and contribution.

PRODUCT OVERVIEW

The TT4130 can be used to continuously monitor any DVB/ATSC Transport Stream. It can be installed in critical points along the transmission chain to detect and locate errors in order to keep the quality of service as high as possible.

The web based user interface allows the unit to be remotely controlled from any computer supporting a web browser. It also features SNMP alarm reporting to top-level network management systems, like TANDBERG nCompass Monitoring, making it ideal as a watchdog in large-scale monitoring systems.

Standard Features Include:

- Supports both DVB and ATSC specifications
- Monitors VC-1 and MPEG-4 AVC streams
- Modulation measurements for RF inputs
- Error detection according to ETR290 specification
- Bitrate alarms
- TS / Service / PID analysis
- PSI / SI (DVB) and PSIP (ATSC) table analysis
- User friendly remote control from web browser
- Internal alarm / event logging
- Alarm relay
- Lose of MIP detection
- TS cycling for QPSK allows one unit to monitor 10s of transponders
- Additional table decoding of SDT other tables and all EIT tables
- High bitrate capacity (90 Mbit/s)
- DVB ASI burst input on same card
- IP input interface with IP FEC detection
- ASI output offering an active loop-through output of the input signal source
- 10/100 Mbit Ethernet TCP/IP interface

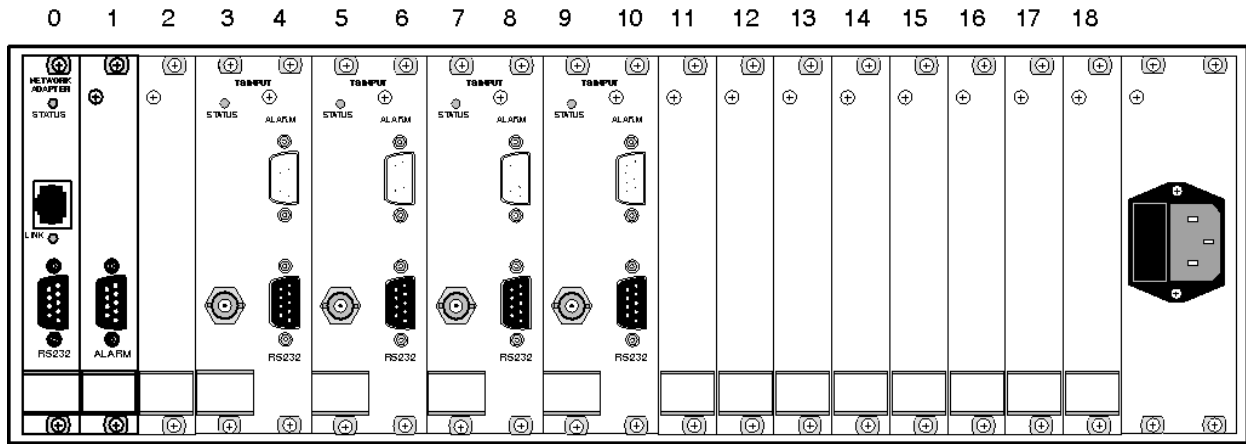
BASE UNIT FEATURES

TT4130 Input Option Boards

TT4130 units can support any 4 of the following inputs and 2 additional DVB ASI inputs or 1 DVB ASI Burst input:

- DVB ASI /M2S Input (TT4130/HWO/IL1)
- DVB SPI (DVB/LVDS) Input (TT4130/HWO/IL2)
- QPSK Demodulator (TT4130/HWO/IM3)
- QAM Demodulator (TT4130/HWO/IM5)
- 100BaseT Ethernet IP Input (TT4130/HWO/IT20)
- SMPTE 310 Input (TT4130/HWO/IT12)
- TTV G.703 34 Mbit/s (TT4130/HWO/IT5)
- TTV G.703 45 Mbit/s (TT4130/HWO/IT6)
- ATM AAL-1 (DVB G.703) 34 Mbit/s (TT4130/HWO/IT7)
- ATM AAL-1 (DVB G.703) 45 Mbit/s (TT4130/HWO/IT8)
- ATM AAL-1 155 Mbit/s Electrical (TT4130/HWO/IT16)
- ATM AAL-1 155 Mbit/s Optical Multi Mode (TT4130/HWO/IT14)
- ATM AAL-1 155 Mbit/s Optical Single Mode (TT4130/HWO/IT15)
- ATM AAL-5 155 Mbit/s Optical Multi Mode (TT4130/HWO/IT9)
- ATM AAL-5 155 Mbit/s Optical Single Mode (TT4130/HWO/IT10)
- ATM AAL-5 155 Mbit/s Electrical (TT4130/HWO/IT11)

SAMPLE CONFIGURATION



SPECIFICATIONS

Inputs

- DVB ASI/M2S**
Connector: BNC (female)
Max 90 Mbit/s

- DVB Parallel Connector:** 25-pin D type

- QPSK Demodulator**
Connector: F-type (female), 75ohm
Frequency range: 950 – 2150MHz
Symbol rates: 2 – 30.5 Mbaud
LNC power: 13V, 18V or off
22KHz tone

- QAM Demodulator (only Annex A)**
Connector: F-type (female), 75ohm
Channel Bandwidth: 8 MHz
Tuner frequency range: 50-860 MHz

- SMPTE 310M Input Interface**
Connector: BNC (female)

- G.703 TANDBERG Protocol Input Interface**
Connector: BNC (female)
34 Mbit/s (E3) and 45 Mbit/s (DS3) PDH rate

- ATM Input Interfaces**
Connector: BNC (female)
34 (E3) or 45 (DS3) Mbit/s AAL-1, electrical (PDH)
155 Mbit/s AAL-1 electrical (SDH/SONET, STM-1)
155 Mbit/s AAL-5 electrical (SDH/SONET, STM-1)
155 Mbit/s AAL-1 optical (SDH/SONET, OC-3) SM/MM
155 Mbit/s AAL-5 optical (SDH/SONET, OC-3) SM/MM

- IP - Ethernet Input Interface**
100BaseTX Fast Ethernet

Control

- 10BaseT Ethernet interface

- TCP/IP protocol support

- Remote control from Internet Explorer / Netscape Web Browser (must support JAVA)

- SNMP agent for alarm trap reporting to Network Management System

Features

- Error detection according to DVB ETR290 specification for real time monitoring of MPEG-2/ DVB-TS

- Internal alarm / event logger

- TS Analysis**
Shows all present PIDs
Monitoring of total and effective bitrate
Detection of DVB ASI packet length

- Service Analysis**
Shows Service IDs, names and components (based on PSI/SI or PSIP analysis)
Dynamically updated graphical view of service bitrates including detection of min/max values
Service oriented alarm reporting

- PID Analysis**
Dynamically updated graphical view of individual PID bitrates including detection of min/max values
PCR jitter measurements, including real-time graphical view of PCR jitter distribution
Scrambling detection
Decodes PSI/SI/PSIP tables (shows fully decoded table syntax and hex tables)

- Configurable Alarm Relays**

- Remote Monitoring**
Modulation measurements for RF inputs (QPSK and QAM)

Physical and Power

- Input Voltage**
184-264 Vac or 90–132 Vac (strap selectable), -48 Vdc (optional)

- Cooling**
Convection

- Dimensions (W x D x H)**
483 x 350 x 132.5mm (19" x 13.7" x 3RU)

Environmental Conditions

- Operating Temperature**
0°C to +45°C (32°F to 113°F)

- Storage Temperature**
-20°C to +70°C (-4°F to 158°F)

- Relative Humidity**
5-95% (non condensing)

Compliance

- CE marked in accordance with Low Voltage Directive (LVD) 73/23/EEC and EMC directive 89/336/EEC



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