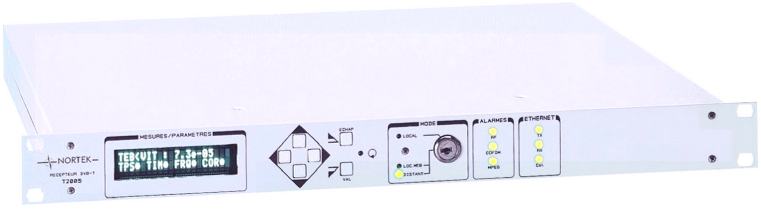
DIGITAL TV

T2035
DVB-S SATELLITE DIGITAL MONITORING RECEIVER



The T2035 is designed for feeding terrestrial or cabled networks and for monitoring satellite receiving systems

Highlights

- QSKP front-end full ETSI EN 300421 compliant
- Frequency tuneable upon 950-2150 MHz frequency band
- MPEG2-TS provided on 2 ASI outputs at 270 Mbits/s bit rate, according to EN 50083-9 standard
- MPEG2-TS ASI input
- RF demodulation quality measurements and parts of MPEG2-TS analysis according to ETR290
- Internal MPEG-2 demultiplexer-decoder – PAL,SECAM, RGB, and audio outputs
- Access to configuration data and analysis (results) on front panel by display and keyboard
- Full remote control through RS422 serial link and analysis alarms through “dry contacts”
- Embedded software can be remotely up-graded
- Alarm thresholds can be turned for each measurement or analysis parameter
- 19” 1 U cabinet – 100/240 V – 47/60 Hz-power supply
- Option : Full remote control though Ethernet TCP/IP link 10BaseT 10 Mbits/s for services HTTP, FTP, TELNET, SNMP…

T2035 DVB-S SATELLITE DIGITAL MONITORING RECEIVER

FRONT-END FUNCTIONALITY

Full compliant to ETS 300- 421 specification
Frequency tunable upon 950-2150 MHz frequency band
Input level : -65 to – 25 dBm;
Code rate : 1/2, 2/3, 3/4, 5/6, 7/8
Access to all demodulation parameters is available either on the front panel or remotely.

INPUT-OUTPUT MPEG2-TS

The extracted MPEG2-TS (Transport Stream) main stream is provided on both of the ASI (Asynchronous Serial Interface) outputs according to the specification EN 50083-9.
Bit rate : 270 Mbits/s
Packet size : 188 -204 ;
Burst or punctured data
Optionally, a SPI (Synchronous Parallel Interface) output can be provided.
An ASI input to access the MPEG-2TS demultiplexer-decoder is also available.
Bit rate : 270Mbits/s
Packet size : 188 -204 ;
Burst or punctured data
Access to ASI configuration parameters is available either on the front panel or remotely

MPEG2 DEMULTIPLEXING-DECODING FUNCTIONALITY

The extracted MPEG2-TS from the QPSK Front-End or from the ASI input is analyzed according to ETR 290
The elementary audio an video MPEG stream selected by the user are uncompressed
The video signal is then converted from digital to analog and coded to the color standards : SECAM, PAL .
The composite signal is output on a BNC connector at the rear of the equipment.
Simultaneously the RGB color components are provided on a D-SUB /HD 15 pins (VGA type) connector.
The audio channel is output on XLR 5 type connector.

ANALYSIS –MEASUREMENT FUNCTIONALITY

The equipment provides permanently :
Quality measurements for RF demodulation :
BER (channel BER) before and after Viterbi correction ,
number of uncorrected packets,
RF-AGC level,
Frequency and clock rate offsets,
Analysis according to ETR290
1.1 TS synchro Loss /1.2 Synchro Error/1.3 PAT Error/1.4 Continuity Indicator Error/1.5 PMT Error
1.6 PID Error/2.1 Error Indicator to 1/2.2 CRC Error …/2.3 PCR recurrence/2.4 Selected program(s) PCR precision]
2.5 PTS recurrence/2.6 CAT Error/3.1 NIT Error/3.2 SI SI recurrence//3.4 PID not referred/3.5 SDT Error
3.6 EIT Error/3.7 RST Error/3.8 TDT Error
Access to ETR290 analysis is available either on the front panel or remotely (see below)

ALARMS FUNCTIONALITY

The equipment provides an alarm for each measurement. The alarm threshold can be set individually.
4 synthesis alarms are provided: they allow the combination of 2 or more alarms according to a scheme defined by the user.
Access to theses 4 alarms is provided on dry contacts at the rear.
On the front panel, 3 pre-defined synthesis alarms (RF, COFDM et MPEG) and 4 user defined synthesis alarms are displayed on 6 LED.
Alarm status can be accessed through the serial link or remotely (see below)
If option, SNMP “traps” can be sent on user demand over Ethernet.

REMOTE CONTROL

Through dry contacts: 4 user’s defined synthesis alarms and “power supply on” are available.
Remote Reset is allowed by strapping 2 contacts on the “dry contacts” connector.
Through RS422 serial link: a console monitor allows access to all the functions of the equipment: configuration, measures, alarms.
Through an Ethernet PCP/IP proxy board , full remote control is available using HTTP, FTP, SNMP protocols.
Web server is embedded.

ORDERING DESIGNATION

T2035 2 : DVB-S satellite digital TV receiver
Option TCP/IP : Ethernet TCP/IP proxy board

NORTEK
21, rue Elisée Reclus - 59650 Villeneuve d’Ascq - France
Tel : +33 (0)3 20 05 55 36 - Fax : +33 (0)3 20 05 30 69
E-mail : contact@nortek-tv.com

Edition July 2006