XTASI

Performance Class measurement receiver modules

Advanced Broadcast Components
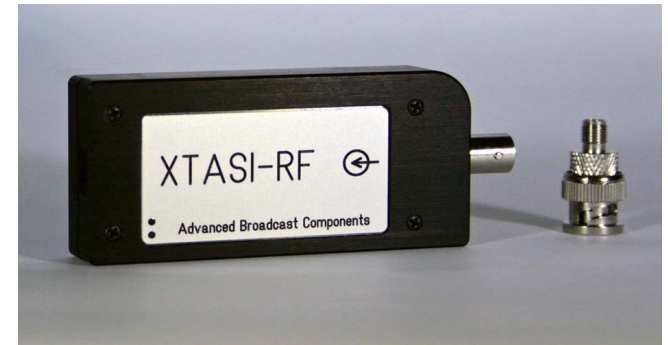Frankfurterstrasse 21
64720 Michelstadt
www.4T2.eu

measurement instruments using XTASI

- 4T2 Portable
- 4T2 Rack
- XTASI-RF, -ASI, -S2+
- 4T2 Broadcast Multi Probe

features of the XTASI module line

- Providing broadcast physical interfaces to laptop, or office computers
  - All aluminium housing < 110 g, (100 x 42 x 16) mm
  - USB powered and controlled by host
  - Lifetime warranty
  - Full transport stream analysis and decoding

- XTASI-RF DVB-T/T2 receiver
  - XTASI-RF tab sheet in 4T2 Content-Analyser
  - Displays Constellation, Impulse Response, Spectrum, Error Rates, TPS, …

- XTASI-ASI DVB-ASI input and Output interfaces
  - Legacy baseband interconnect for the 4T2 Content-Analyser

- Any ABC hardware enables the 4T2 Content-Analyser to work on IP using the PC ethernet interface
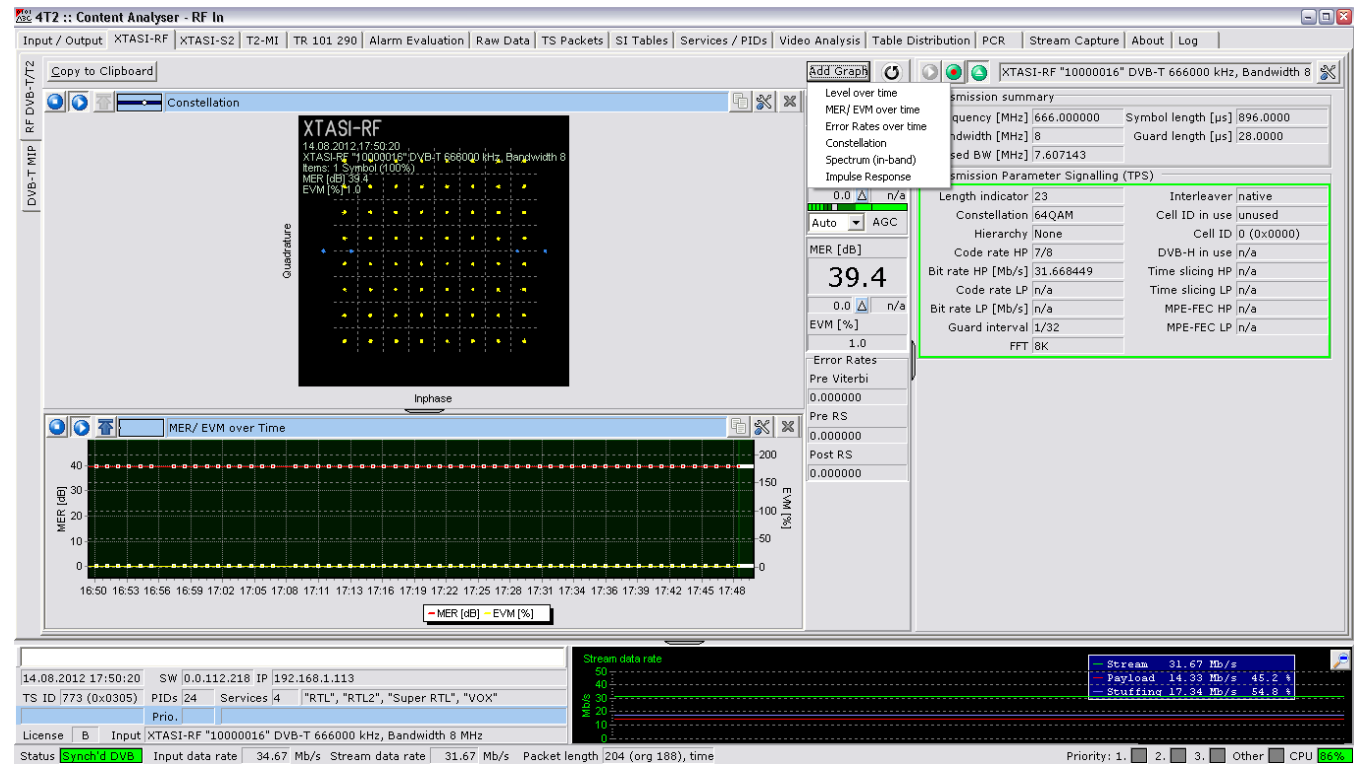
DVB-T specific RF measurements

Graphical Displays:
- Constellation
- Impulse Response
- Spectrum (with shoulder measurements)

Numerical Results:
- Level
- MER (>42dB performance)
- EVM
- bit errors (Viterbi/RS)

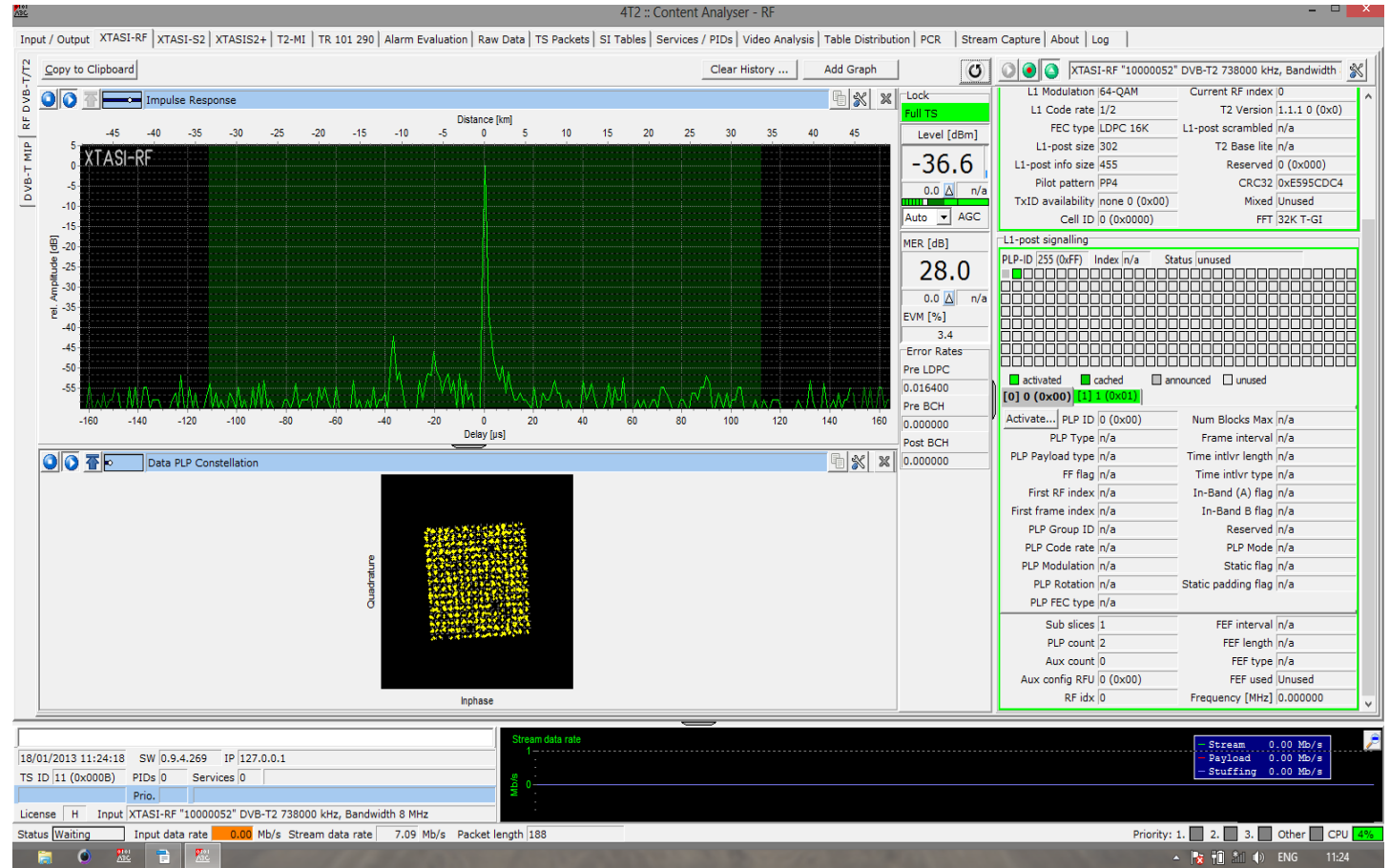Parameter signalling display

DVB-T2 specific RF measurements

Graphical Displays:
- Constellations
  L1post, Data-PLP
- Impulse Response
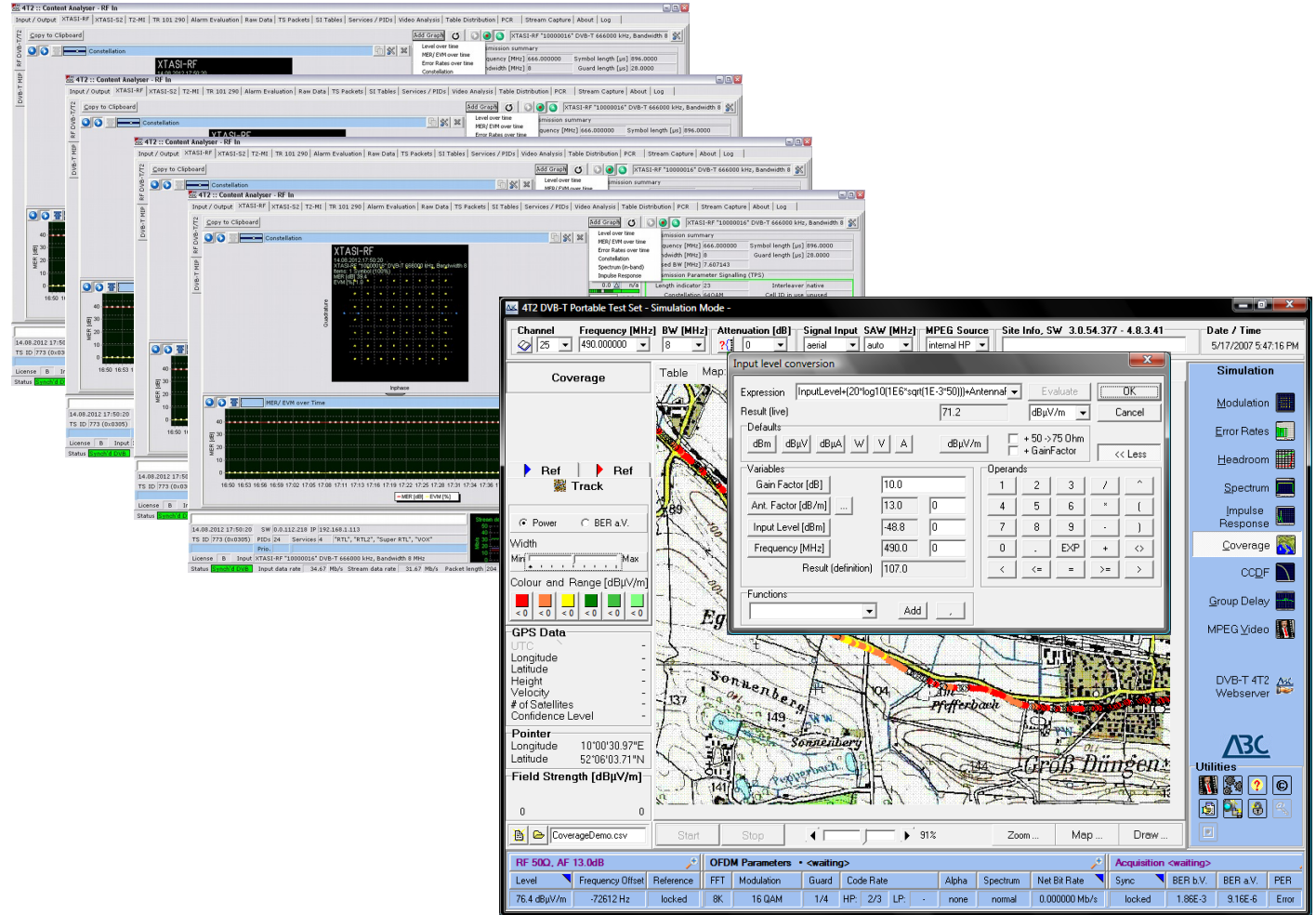- Spectrum (with shoulder measurements)

Numerical Results:
- Level
- MER (>42dB performance)
- EVM
- bit errors (LDPC/BCH)

Parameter signalling display

XTASI-RF based multi-channel coverage

XTASI-RF modules controlled through 4T2 Content-Analyser application provide internal connection to Coverage server application Coverage server provides map-data (open street map format) and provides database for measurement results
All measurement parameters of multiple XTASI-RF modules stored in csv database with kml/kmz output conversion
Multiple channels results stored in same database

DVB-T/T2 technical specifications

Receiving Frequency:		46.5 MHz ÷ 870 MHz
Input level:		-80 dBm ÷ 0 dBm
Graphical Displays:	DVB-T	Constellations
	DVB-T2	L1post, Data-PLP
		Impulse Response
		Spectrum (with shoulder measurements)
Numerical Results:	DVB-T	Level
	DVB-T2	MER (>42dB performance)
		EVM
		bit errors (Viterbi/RS or LDPC/BCH)
Parameter signalling display		Parameter signalling display

DVB-S specific RF measurements

Graphical Displays:
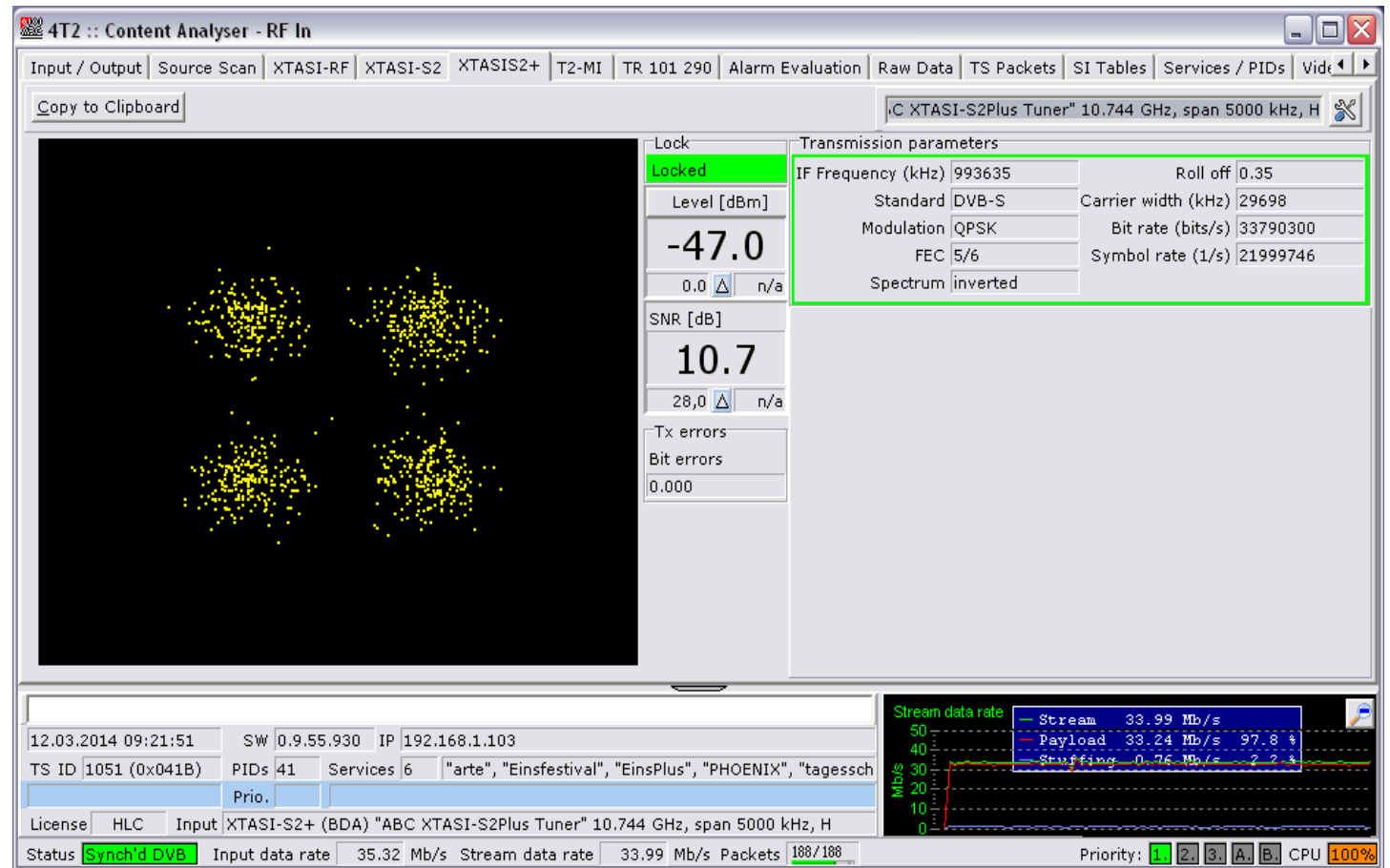- Constellation
- Spectrum

Numerical Results:
- Level, EIRP
- MER, SNR
- Eb/No, Es/N0

Transmission Errors:
- Viterbi and Reed Solomon FEC

Transmission Parameters:
- IF-frequency
- modulation, FEC
- spectrum orientation,
- roll-off, carrier-width,
- Bit-rate, Symbol-rate

DVB-S2 specific RF measurements

Graphical Displays:
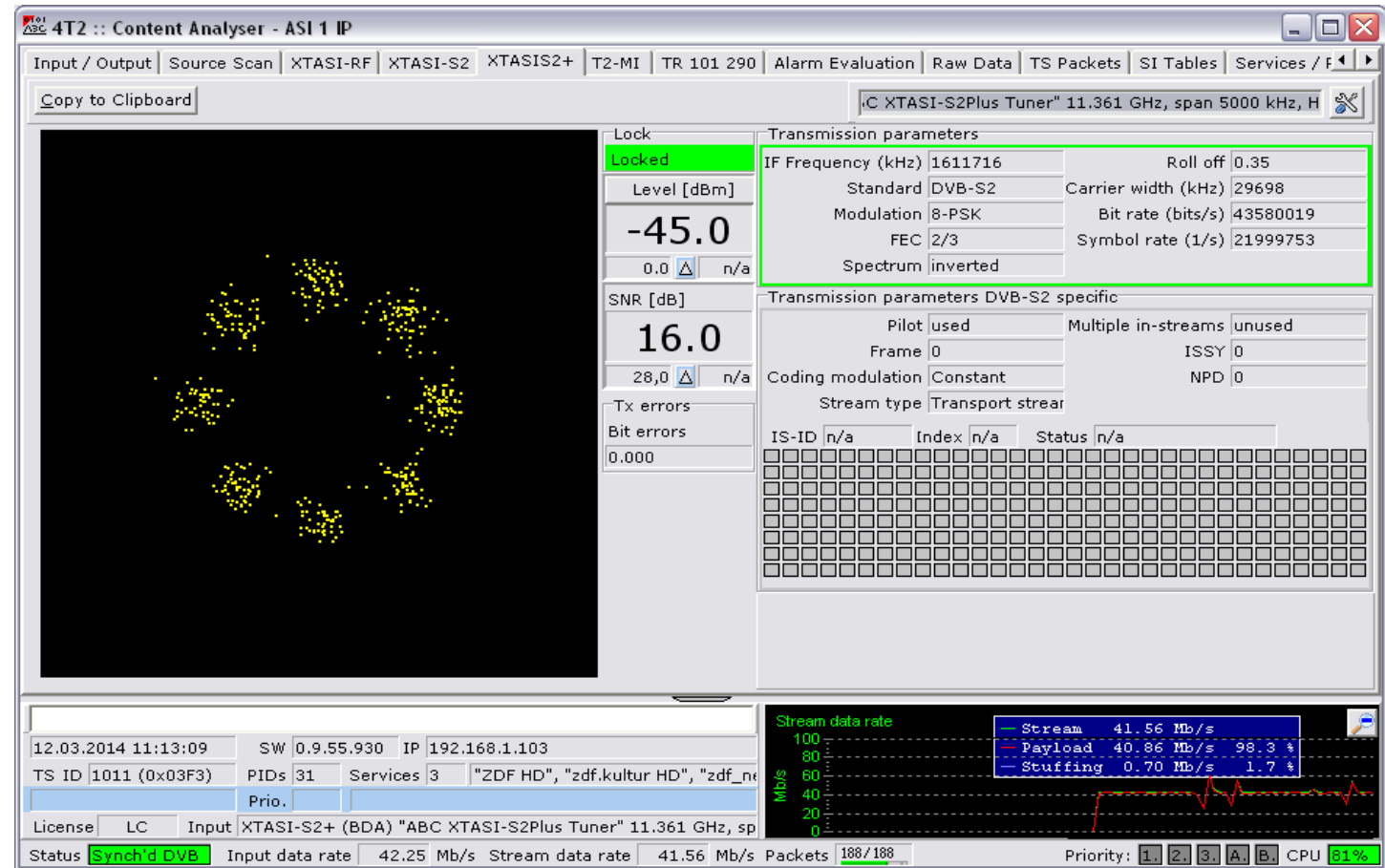- Constellation

Numerical Results:
- Level, EIRP
- SNR
- Eb/No, Es/N0

Transmission Errors:
- LDPC, BCH short and normal modes

Transmission Parameters:
- IF-frequency
- modulation, FEC
- spectrum orientation,
- roll-off, carrier-width,
- Bit-rate
- Symbol-rate
- Pilot, Multi-Stream, ISSY, NPD, Stream Type

DVB-S/S2 technical specifications

Receiving Frequency:		950 MHz ÷ 2150 MHz
Input level:		-69 dBm ÷ -23 dBm
Symbol Rate:	DVB-S	QPSK/8PSK 0.2 ÷ 45 Msps
	DVB-S2	QPSK 0.2 ÷ 45 Msps
DVB-S:	QPSK	1/2, 2/3, 3/4, 5/6, 7/8
DVB-S2 CCM ACM VCM:	QPSK	1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
	8PSK	3/5, 2/3, 3/4, 5/6, 8/9, 9/10
	16APSK	2/3, 3/4, 4/5, 5/6, 8/9, 9/10
	32APSK	3/4, 4/5, 5/6, 8/9, 9/10

DVB-S/S2 technical specifications

Graphical Displays:		Constellation, Spectrum
Numerical Results:		Level, EIRP, MER, SNR, Eb/No, Es/N0
Transmission Errors:	DVB-S	Viterbi
	DVB-S2	LDPC, BCH
Transmission Status:	DVB-S & DVB-S2	IF-frequency, transmission-standard, modulation, FEC, spectrum orientation, roll-off, carrier-width, Bit-rate, Symbol-rate
	DVB-S2	Pilot, Multi-Stream, ISSY, NPD, Stream Type

further information available at
www.4T2.eu

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