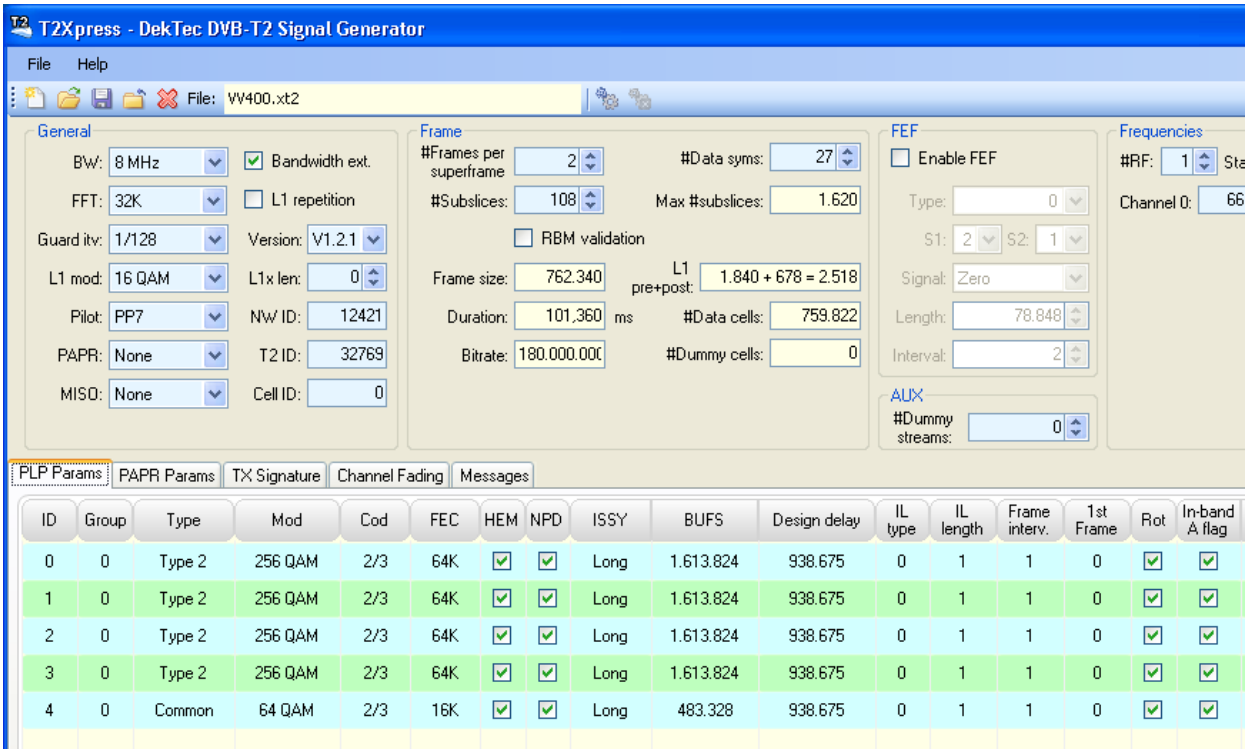
DTC-378 T2Xpress

DVB-T2 Signal Generator Software

- Off-line generation of DVB-T2 signals
- Full multi-PLP DVB-T2 gateway function
- AWGN and multipath simulator option



FEATURES

- Complete DVB-T2 modulator with file input and DVB-T2 RF output on e.g. DTA-115
- *T2Xpress* can also operate as DVB-T2 gateway with file input and T2-MI written to a file, or real-time T2-MI over ASI or IP
- With DekTec's DTC-371-IQ option: Off-line generation of I/Q sample files
- Full user control over general DVB-T2 parameters, T2-Frame structure and parameters per PLP
- Input from Transport-Stream files, built-in O151 PRBS test-signal generators or V&V Workgroup stream generator model
- "Big-TS splitter" function with SI processing for easy generation of multi-PLP streams with a common PLP
- Receiver Buffer Model validation
- MISO simulation: Generation of I/Q sample files for both MISO transmitter signals with optional independent channel modelling of each signal
- Can be used in conjunction with DekTec's DTC-305-CM *XpressSim* channel simulator with AWGN generator (adjustable SNR), multipath fading, Rayleigh channels and Doppler simulation to accurately simulate reflections and a moving receiver

APPLICATIONS

- Test-signal generator for DVB-T2 receiver chip development, testing and evaluation
- Signal generator for DVB-T2 receiver demonstrations and field trials

SUPPORT

- *T2Xpress* is being improved continuously and keeps track of developments in DVB-T2. Any product updates will be free for a period of at least one year after invoice date

SUPPORTED DVB-T2 PARAMETERS

Parameter	Range
General	
Bandwidth	1.7, 5, 6, 7, 8 or 10MHz
FFT mode	1K, 2K, 4K, 8K, 16K or 32K
Guard interval	1/32, 1/16, 1/8, 1/4, 1/128, 19/128 or 19/256
L1 modulation	BPSK, QPSK, 16/64-QAM
Pilot pattern	PP1 .. PP8
Bandwidth ext.	Extended carrier mode yes/no
PAPR	None, ACE, TR, ACE+TR
MISO	Tx1 and/or Tx2, Tx1+Tx2
IDs	Network, Cell, T2 System
PLP	
IDs	PLP ID, Group ID
Type	Type 1, Type 2, Common
Modulation	QPSK, 16/64/256-QAM
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6
FEC	16K or 64K
HEM	High-efficiency/Normal mode
NPD	On/off
ISSY insertion	None, Long, Short, BUFS, Tdesign
Time interleaver	Type, Length, Interval, 1st Frame
Constellation	Rotated, Normal
Signalling	In band A, B, None
Other PLPs	List in in-band signalling yes/no
FF	PLP on same channel yes/no
Frame	
Structure	#T2 frames, #T2 sub slices, #data symbols
Source	
PRBS	O151 PRBS test signal
TS	One (partial) stream per PLP
Big TS	T2Xpress extracts partial TSs
TFS	
#Carriers	1 .. 7
FEF	
Parameters	Type, S1, S2, Length, Interval
Signal	Zero, 1K OFDM of PRBS signal
Output	
I/Q Format*	Float32, Int16, Text
TP Data*	Test-Point data files
T2-MI	VBR, CBR
Real-time	DVB-T2 RF, T2-MI over ASI/IP

* I/Q format and test point data requires the DTC-371-IQ option

CHANNEL SIMULATION* PARAMETERS

Parameter	Range
AWGN SNR	0 .. 60dB
Fading Paths	
#Paths	0 .. 32
Type	Constant delay Constant Doppler Rayleigh Jakes Rayleigh Gaussian
Attenuation	0 .. 60dB
Phase	0 .. 360°
Doppler (@8MHz)	0.3mHz .. 274kHz (Gaussian) 1.8mHz .. 914kHz (Jakes)

* Requires DTC-305-CM option

PC REQUIREMENTS

Platform	Windows XP/2003/Vista .NET v2.0
Processor*	P4@2.0GHz (off-line mode) Core 2, Core i7 (real-time)
RAM	1 GB min.

* Or equivalent AMD processors

RELATED PRODUCTS

Type	Description
DTA-115	Multi-standard modulator with VHF/UHF upconverter for PCI
DTU-215	Multi-standard modulator with VHF/UHF upconverter for USB
DTA-2135-T2	DVB-T2 receiver for PCI
DTC-300	***StreamXpress*** playout software
DTC-305-CM	***XpressSim*** channel-modelling option
DTC-371-IQ	I/Q sample generation option

ORDERING INFORMATION

Type	Description
DTC-378-T2	***T2Xpress*** DVB-T2 signal generator software

Please refer to **www.dektec.com** for the latest pricing and a list of distributors and resellers.