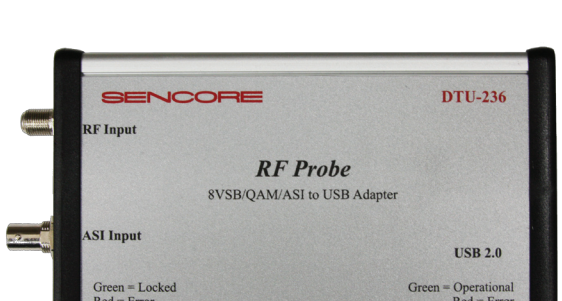
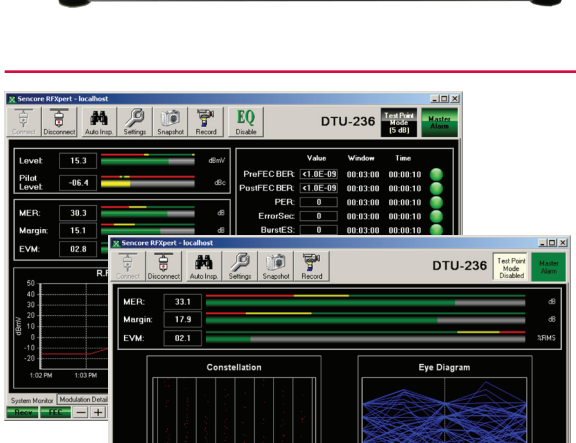
DTU-236 Portable RF Probe, RFXpert and StreamXpert

8-VSB, QAM A/B/C and NTSC Analysis and Monitoring Hardware / Software Bundle



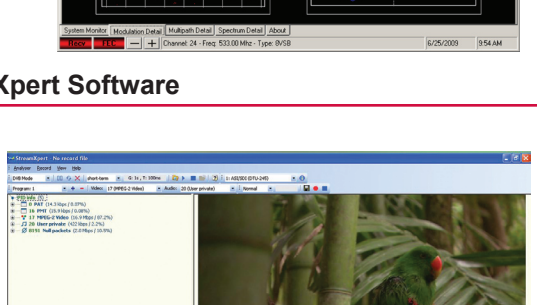
The DTU-236 RF Probe and RFXpert software is a comprehensive solution designed to provide real-time analysis and monitoring of terrestrial signals (8-VSB, QAM A/B/C and NTSC RF channels). The RFXpert software is intended to be loaded by the end-user on a PC or laptop and work in conjunction with the DTU-236 RF Probe. RFXpert provides complete RF analysis and logging, along with transport stream recording.



The DTU-236 can be combined with Sencore's RFXpert software for a truly powerful RF measurement tool. RFXpert provides easy-to-read spectral displays, both constellation and eye diagram displays, and the ability to turn off and on 8-VSB tap equalization to see the uncorrected signal being received.

- True demodulated digital reading for MER, Pre-BER, Post BER and EVM
- A proof-positive method of signal documentation or drop-point comparisons with programmable, user defined logging and auto-inspection capabilities.

RFXpert Software



Adding StreamXpert to a DTU-236 makes for a cost-effective and user-friendly MPEG-2/H.264 transport stream analyzer. Signals can be analyzed from either the ASI or RF inputs of the DTU-236 and can be validated against industry-standard ETR101-290 templates. Transport streams can also be captured in the field with StreamXpert for later use.

- Real-time analysis, monitoring and recording of MPEG-2/H.264
- PCR Accuracy and ETR101-290 checking
- Integrated MPEG-2 video and audio decoding with AC3 and Dolby Digital+ Support

StreamXpert Software

DTU-236 RF Probe, RFXpert and StreamXpert

Specifications

DTU-236 RF Probe

RF Input:

Connector:	75 Ω type 'F'
Frequency:	44-865 MHz
Level Tuning:	-25 to 60 dBmV
Modulation:	8-VSB, QAM A/B/C, NTSC
Band:	Broadcast, FCC Cable, IRC, HRC Cable

ASI Input:

Connector:	75 Ω BNC
Receive Bitrate:	0-214 Mbp/s

Power:

Source:	USB 2.0 port of host PC
Voltage:	+5 VDC
Current:	>500mA*
	*dual USB connections to PC

Dimensions:

Physical:	7.1" x 4.2" x 1.4"
Weight:	< 1 lb.

RFXpert

RF Tests:

Level Measurement:	>-30 to +50 dBmV, 0.1 dB resolution, +/- 1 dB accuracy
MER:	15 to 38 dB (measured from constellation)
EVM:	2.3 to 16.5% RMS
BER:	Pre/Post FEC, SER, Errored Seconds
Modulation Displays:	Constellation and Eye diagram
Echo Profile:	-2.3 to +40 µS delay range, 0 to -30 dBc echo level
Spectrum Display:	Channel (6-8 MHz), Adjacent (18-24 MHz), Full (50-865 MHz)

Logging:

Type:	Interval and Alarms
Auto Inspect:	Automatic analysis and logging of a channel plan
File:	User-defined, limited by host hard drive space

Minimum PC / Laptop Requirements:

Operating System:	32-bit Windows XP/2003/Vista
USB:	2.0 for communication/power
Processor:	PIII 1.0 GHz
RAM:	256 MB minimum

StreamXpert

Input Bitrate:

214 Mb/s maximum, limited by the capabilities of the input device

Minimum PC / Laptop Requirements:

Operating System:	Windows XP/2003/Vista or higher
DirectX:	9.0c or higher
Video Card:	AGP 64 MB equivalent or better (SD video decoding); 1 GB for HD H.246
Sound Card:	Standard sound card (for audio decoding)
Processor:	PIII 1.0 GHz (no video decoding) P4 1.7 GHz / Pentium M 1.5 GHz (SD Decoding) P4 3.0 GHz / Pentium M 2.0 GHz (HD Decoding)* *Hyper threading CPU yields best results* **Or equivalent AMD processor**
RAM:	256 MB minimum Best results (HD) with 512 MB+ dual channel DDR400
Disk Drive: (For Stream Recording)	Rates > 40 Mb/s use drive separate\ from Operating System Rates ≤ 100 Mb/s use single 7200 RPM SATA or SCSI Rates > 100 Mb/s use single 15000 RPM SCSI, Striped 7200 RPM SATA, or Striped SCSI* *Best performance is achieved using Striped SATA or SCSI Drives*

Note1: Parallel ATA Drives may be used, but usually do not achieve same performance as SATA or SCSI.

Note2: Drive specifications are recommendations. Different architectures will yield different results in some systems. When in doubt, refer to drive/motherboard specifications or contact a Sencore representative.

Provided by: Mega Hertz 800-883-8839

sales@go2mhz.com www.go2mhz.com