

Multi-Standard Modulator for USB-2

- ❑ No power adapter required
- ❑ Fully agile from 47 to 1000MHz
- ❑ Channel simulation option

FEATURES

- USB-2 based multi-standard modulator with support for most QAM-, OFDM- and VSB-based modulation standards
- Powered from the USB-2 bus, so no external power adapter is required
- For each standard, all modulation parameters are supported
- Direct digital conversion to 47..1000MHz for excellent signal quality
- Playout of I/Q sample files
- Output amplifier with programmable 0 .. 31.5dB attenuator in 0.5dB steps
- API is fully compatible with other DekTec digital-video output adapters



APPLICATIONS

- Multi-standard test generator
- Demonstrations
- Research and development

KEY ATTRIBUTES

Parameter	Value
Frequency range	47 .. 1000MHz ±1ppm
Bandwidth	2.7 .. 8.0MHz
MER (OFDM)	>42dB
RF Connector	75-Ω F
Return loss	≥15dB (47 .. 1000MHz)
Level (QAM)	-45 .. -15dBm ±2dB
Level (OFDM)	-48 .. -18dBm ±2dB
Amplitude Step Size	0.5dB
Adjacent Channel	-55dB (QAM) -52dB (OFDM)
Phase noise	<-95dBc @ 10kHz
Spectral purity	>50dB (47 .. 1000MHz)
USB port	USB-2
Power (through USB-2)	5V, 500mA
Dimensions (LxWxH)	123 x 62 x 22mm

MODULATION STANDARDS

Modulation	Standard
ATSC VSB	ATSC A/53E
ADTB-T / DTMB	GB 20600-2006
DVB-C	EN 300 429
DVB-T / DVB-H	EN 300 744
DVB-T2	EN 302 755
IQ	I/Q sample playout
ISDB-T	ARIB STD-B31
QAM	J.83 Annex A/B/C

OPTIONS

Type	Description
DTC-370-ISDB	ISDB-T modulation
DTC-374-DTMB	DTMB modulation
DTC-376-CM	Channel simulation
DTC-378-T2	DVB-T2 modulation