

# Multi-Standard Modulator for USB-2

DekTec DTU-215



## KEY FEATURES

- USB-2 based multi-standard modulator with support for most QAM, OFDM and VSB based modulation standards
- Powered from the USB-2 bus, no external power adapter is required
- For each standard, all modulation parameters are supported
- Direct digital conversion to 47 to 1000MHz for excellent signal quality
- Playout of I/Q sample files
- Output amplifier with programmable 0 to 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

## OPTIONS

Type	Description
DTC-305-CM	Channel simulation
DTC-370-ISDB	ISDB-T modulation
DTC-371-IQ	I/Q sample playout
DTC-374-DTMB	DTMB modulation
DTC-375-CMMB	CMMB modulation
DTC-378-T2	DVB-T2 modulation

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

## KEY ATTRIBUTES

Parameter	Value
Frequency range	47 to 1000MHz $\pm$ 1ppm
Bandwidth	2.7 to 8.0MHz
MER (OFDM)	>42dB
RF connector	75 $\Omega$ F
Return loss	$\geq$ 15dB (47 to 862MHz)
Level (QAM)	15dB (47 to 862MHz)
Level (OFDM)	15dB (47 to 862MHz)
Amplitude step size	0.5dB
Adjacent channel	-54dB (QAM) -54dB (QAM)
Phase noise	<-95dBc @ 10kHz
Spectral purity	>50dB (47 to 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
-54dB (QAM)	-54dB (QAM)
DVB-C	EN 300 429
DVB-T / DVB-H	EN 300 744
DVB-T2	EN 302 755
ISDB-T	ARIB STD-B31
QAM	J.83 Annex A/B/C