

# Multi-Standard Modulator with IF and Digital Output

- ATSC, DTMB, DVB-T/H, ISDB-T, QAM
- 44-MHz IF and Digital I/Q Outputs
- Bi-directional DVB-ASI Port

## FEATURES

- Multi-standard modulator with support for most QAM-, OFDM- and VSB-based modulation standards
- Supports all constellations and modulation modes for each supported standard
- Two user-configurable IF outputs; real and imaginary output facilitating quadrature upconversion
- IF outputs are lightly filtered enabling off-board high-quality filtering
- Digital baseband I+Q outputs
- Bi-directional DVB-ASI port
- Programming interface (DTAPI) is fully compatible with other DekTec digital-video output adapters
- PCI rev 2.2, 32 bit, 33 or 66 MHz bus



## APPLICATIONS

1. Digital I/Q Generator
2. High-Quality Modulator
3. IF output for your (OEM) application

## KEY ATTRIBUTES

Parameter		Value
Modulation Bandwidth		5.0 .. 8.0MHz
MER		41dB RMS (DVB-C) 42dB RMS (DVB-T)
IF Output	Frequency	44.0MHz ±1ppm
	Connector	50-Ω BNC (2x)
	Return Loss	≥20dB (5 .. 70MHz)
	Level (QAM)	-11dBm ±1dB
	Level (OFDM)	-14dBm ±1dB
	Phase Noise	<-115dBc @ 10kHz <-105dBc @ 1kHz
Spectral Purity		>40dB (0 .. 1GHz)
Digital Output	Connector	14-pins header
	Signal Level	LVDS
	Data Bus	16-bit I+Q @ 44MHz
DVB-ASI	Connector	75-Ω BNC
	Return Loss	≥15dB (5 .. 270MHz)

## MODULATION STANDARDS

Modulation	Standard
ATSC VSB subsyst.	ATSC A/53E
ADTB-T / DTMB	GB 20600-2006
DVB-C	EN 300 429
DVB-T / DVB-H	EN 300 744
ISDB-T / ISDTV	ARIB STD-B31
QAM	J.83 Annex A/B/C

## ORDERING INFORMATION

Type	Description
DTA-117-SP	Multi-Standard Modulator, IF / Digital Output, <i>StreamXpress</i>
DTC-370-ISDB	ISDB-T software option
DTC-374-DTMB	DTMB software option
DTA-117-ISDB-SP	DTA-117-SP + DTC-370-ISDB
DTA-117-DTMB-SP	DTA-117-SP + DTC-374-DTMB

The latest pricing information and a list of DekTec resellers can be found on [www.dektec.com](http://www.dektec.com). An OEM version of the DTA-117 is available upon request; please contact DekTec for OEM conditions.