

Multi-Standard Modulator with IF and Digital Output

- Supports many modulation standards
- 36-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 66MHz bus



APPLICATIONS

- Digital I/Q generator
- High-fidelity modulator
- 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	36.0MHz ±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 @ 36MHz
ASI	Connector	75-Ω BNC
	Return loss	≥15dB (5 .. 270MHz)

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	Direct I/Q sample payout
ISDB-T	ARIB STD-B31
QAM	J.83 Annex A/B/C

ORDERING INFORMATION

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