

## Multi-Standard L-Band Modulator for PCIe

- ❑ Complete DVB-S(2), ISDB-S modulator
- ❑ Fully agile from 950 to 2150MHz
- ❑ AWGN insertion for simulating fading

### FEATURES

- Satellite test modulator with integrated agile L-band upconverter
- Several improvements over DTA-107, especially reduced phase noise
- Programmable channel filter enables custom roll-off factors
- ISDB-S and DAB modulation option
- Programmable output level
- AWGN insertion option
- External frequency reference input
- DVB-S and DVB-S2 modulation with support for all constellations including 16-APSK and 32-APSK
- Free Windows and Linux SDK (DTAPI) is compatible with other DekTec adapters
- Command-line multiplexing tool (part of *StreamXpress*) for creating an ISDB-S stream with TMCC data from a standard TS



### APPLICATIONS

- With *StreamXpress*: Multi-purpose satellite television RF signal generator for R&D, demos, exhibitions, repair, etc.
- With *MuxXpert*: Real-time multiplexing and generation of a DVB-S or DVB-S2 signal
- With *DTAPI*: Create your own application that generates an RF signal that can be directly fed to a satellite receiver

### KEY ATTRIBUTES

Parameter	Value
Modulation	DVB-S(2), ISDB-S, I/Q
Output connector	75-Ω F female
Return loss	> 14dB
Symbol rate	0.088 .. 55MBd
Symbol rate resolution	<30mBd
Output frequency	950 .. 2150MHz
Output level (DVB-S2)	-46.5 .. -15.0dBm
Output level (DVB-S)	-41.5 .. -10.0dBm
DVB-S2 constellations	QPSK, 8PSK, 16APSK, 32APSK
Roll-off factor	0.20, 0.25, 0.35
Phase noise	<-95dBc @ 10kHz
PCI-Express label	PCIe x1

### MODULATION STANDARDS

Modulation	Standard
DVB-S	EN 300 421
DVB-S2	EN 302 307
DAB*	EN 300 401
I/Q*	Arbitrary I/Q samples
ISDB-S*	ARIB STD-B20

\* Option

### ORDERING INFORMATION

Type	Description
DTA-2107-SP	Multi-standard L-band modulator with <i>StreamXpress</i>
DTC-305-CM	AWGN insertion option
DTC-371-IQ	IQ sample playout option
DTC-373-IS	ISDB-S modulation option