

Multi-Standard L-Band Modulator for PCIe

DekTec DTA-2107



KEY 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

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

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 to 55MBd
Symbol rate resolution	<30mBd
Output frequency	950 to 2150MHz
Output level (DVB-S2)	-46.5 to -15.0dBm
Output level (DVB-S)	-41.5 to -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

Type	Description
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 StreamXpress
DTC-305	AWGN insertion option
DTC-371-IQ	IQ sample playout option
DTC-373-IS	ISDB-S modulation option

Sencore is the preferred distributor of DekTec in North America.