

# All-Standard, All-Band Modulator for PCI Express

- Fully agile from 32 to 2186MHz
- Extended 72-MHz bandwidth
- 10-MHz/1-pps GPS synchronisation input

## FEATURES

- High-end test modulator for PCI Express with support for every popular digital TV and digital audio modulation standard
- All-digital modulation for flexibility and excellent signal quality
- Wideband upconverter 32...2186MHz, fully agile over VHF, UHF and L-band
- Digital channel simulator option including multipath echo and phase noise simulation
- Ultra low phase noise
- 10-MHz/1pps input for SFN operation or board-to-board synchronization
- Free Windows and Linux SDK (DTAPI) is compatible with DekTec's other modulators and digital-video output adapters



## APPLICATIONS

- The ultimate test modulator in the lab
- DVB-S2X modulation
- Up to 64-MHz DVB-C2 channel bundling

## KEY ATTRIBUTES

Parameter		Value
Main output	RF connector	50-Ω SMA female
	RF level*	-50 .. 0dBm
	Step size	0.5dB
Monitor output	RF connector	75-Ω F female
	RF level	-45dBm
10-MHz/1pps input		2x 50-Ω BNC female
Frequency range		32 .. 2186MHz
Symbol rate**		0.088 ..85MBd
I/Q sample rate**		0.088 ..85MHz
Bandwidth (max)		72MHz
Transmit MER (typical)***		42dB
Phase noise		<-116dBc @ 10kHz
Spectral flatness		0.5dB
Spectral purity		>50dB
PCI Express label		PCIe3 x1
OS		XP/2k3/Vista/2k8/7/8 Linux 2.6 and higher

\* RF level partly depends on modulation type

\*\* In a PCIe gen2 slot certain sample rate restrictions will apply

\*\*\* MER will depend on modulation standard and RF frequency  
Please refer to DTA-2115 datasheet for detailed specifications

## MODULATION STANDARDS

Standards
ADTB-T, ATSC, ATSC-M/H*, CMMB*, DAB(+)*, DMB-T/H*, DVB-C, DVB-C2*, DVB-H, DVB-S, DVB-S2, DVB-S2X*, DVB-T, DVB-T2*, I/Q*, ISDB-S*, ISDB-T*, QAM-B, QAM-C, T-DMB*

\* Option

## ORDERING INFORMATION

Type	Description
DTA-2115-SP	All standard, all-band modulator for PCIe with <i>StreamXpress</i>
DTA-2115-GOLD	DTA-2115-SP with all options

Please refer to [www.dektec.com](http://www.dektec.com) for the latest pricing and a list of distributors and resellers.

## RELATED PRODUCTS

Type	Description
DTA-2107	DVB-S/DVB-S2/ISDB-S L-band modulator for PCIe
DTA-2111	Low cost multi-standard VHF/UHF modulator for PCIe