

All-Standard, All-Band Modulator for PCI Express

- Fully agile from 32 to 2186MHz
- Single 72-MHz or eight 8-MHz channels
- 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
- Wideband upconverter 32...2186MHz, fully agile over VHF, UHF and L-band
- Firmware option lets the DTA-2115B run as eight independent 8-MHz modulators, each fully agile over VHF and UHF band
- Digital channel simulator option including multipath echo and phase noise simulation
- Ultra low phase noise
- 10-MHz/1 pps input for SFN operation or board-to-board synchronization
- Free Windows and Linux SDK (DTAPI)



APPLICATIONS

- The ultimate test modulator in the lab
- Generation of a network of channels for test and validation environment, or for many-channel distribution over coax

KEY ATTRIBUTES

Parameter		Value
Main output	RF connector	50-Ω SMA female
	RF level	-60 to 0dBm
	Step size	0.5dB
Monitor output	RF connector	75-Ω F female
	RF level	-45dBm
10-MHz/1 pps input		2x 50-Ω BNC female
Frequency range		32 to 2186MHz
Symbol rate		88kBd to 85MBd
I/Q sample rate		88kHz to 85MHz
Bandwidth (max)		72MHz
Transmit MER (typical)		42dB
Phase noise		<-116dBc @ 10kHz
Spectral flatness		0.5dB
Spectral purity		>50dB
PCI Express		PCIe gen3 x1
OS		XP/2k3/Vista/2k8/7/8/10 Linux ≥2.6.18, 3.x, 4.x

This table applies to the single 72-MHz channel firmware. Some values depend on modulation type. In a PCIe gen2 certain restrictions may apply.

MODULATION STANDARDS

Standards
ADTB-T*, ATSC, ATSC-M/H*, ATSC 3.0*, CMMB*, DAB(+)*, DMB-T/H*, DVB-C, DVB-C2*, DVB-CID, DVB-S, DVB-S2, DVB-S2X*, DVB-T, DVB-T2 SPLP (single PLP), DVB-T2 (full)*, I/Q samples*, ISDB-S*, ISDB-T*, ISDB-Tmm*, QAM-B, QAM-C, T-DMB*

* Option

ORDERING INFORMATION

Type	Description
DTA-2115B-SP	All standard, all-band modulator for PCIe with StreamXpress®
DTA-2115B-GOLD	DTA-2115B-SP with all options; includes DTC-385-HW8CH
DTC-371-IQ	I/Q sample playout option
DTC-378-T2	DVB-T2 modulation option, single- and multi-PLP
DTC-384-SWMC	Multi-channel software modulation option
DTC-385-HW8CH	8-channel modulation firmware option