

All-Standard All-Band Modulator for USB-3

DekTec DTU-315



KEY FEATURES

- Pocket size modulator for all popular satellite, cable and terrestrial standards
- Fully agile from 36 to 2150MHz, covering VHF, UHF and L-band
- Modulation bandwidth up to 70MHz
- Excellent signal quality through direct digital synthesis of the RF output signal
- Single USB cable to the DTU-315 supplies power, data and control
- Supports all constellations and modulation modes for each supported DTV standard
- Digital channel simulator option including multipath echo and AWGN insertion
- F and BNC cable assemblies included
- Use with DekTec's **StreamXpress** for easy generation of RF test signals
- Free Windows SDK (DTAPI) for writing your own custom application
- 19" rack-mount kit available for easy integration in fixed setups

APPLICATIONS

- RF test generator in your R&D lab or factory for developing, qualifying or repairing any equipment with a DTV antenna input
- Portable demo set for TV receivers, easy to carry to customer demos, trade shows, etc.
- TV transmission or distribution using modulated signals in shops, hotels, hospitals, etc.

- Modulator for all popular DTV standards
- Fully agile over VHF, UHF, and L-band
- USB cable supplies power, data, control

KEY ATTRIBUTES

Parameter	Value
RF connector	75-Ω micro-BNC female
Frequency Range	36 to 2150MHz
Bandwidth (max)	70MHz
I/Q sample rate	0.08 to 70Msps
RF level	-45 to -25dBm (0.5dB steps)
MER (typical)	>40dB
Phase noise	<-105dBc @ 10kHz
Spectral purity	>50dB
USB port	USB-3**
USB connector	Micro-B female
OS	Windows 7, 8/8.1, 10

* For OFDM standards: up to 1GHz; for single-carrier standards up to 2GHz; above 2GHz the output level is max. 5dB lower.

** Must use a real USB-3 port; the DTU-315 will not operate with USB-2.

MODULATIONS STANDARDS

Standards
ADTB-T, ATSC, ATSC-M/H*, CMMB*, DAB(+)*, DMB-T/H*, DBV-C (QAM-A), DVB-C2*, DVB-S, DVB-S2, DVB-S2X*, DVB-T, DVB-T2 single-PLP, DVB-T2*, I/Q samples*, ISDB-S*, ISDB-T*, QAM-B (J.83 Annex B), QAM-C, T-DMB*

* Option

ORDERING INFORMATION

Type	Description
DTU-315-SP	All-standard all-band modulator for USB- with StreamXpress player/test-generator software
DTU-315-GOLD	DTU-315 with <i>all</i> current and future modulation options
DTR-315-RACK	1U 19"-rack mounting kit for holding up to 8x DTU-315