DTU-331

DekTec

Portable All-Standard RF Probe for USB-3

- ❏ Feature Rich with Dual Tuners: 8 & 60MHz
- ❏ Wide Frequency Range: 42-3220MHz
- ❏ Advanced Analytics with SDR Technology

FEATURES

- **Broad Modulation Standards Support**: Demodulates cable, terrestrial, satellite, and even arbitrary RF signals.

- **Dual Tuners**: 8MHz tuner optimized for cable/terrestrial standards and 60MHz tuner designed for satellite reception.

- **Use of SDR**: Flexibility beyond traditional modulators, advanced RF measurements, adaptable to evolving standards.

- **I/Q Sampling**: Serves as an I/Q sampler for RF signals up to 60MHz bandwidth in the 42 to 3220MHz range.

- **USB 3.0 Type C**: Enables reversible connection and powers device through USB.

- **Free SDK** (DTAPI, Windows only).

APPLICATIONS

- Comprehensive analysis and monitoring of modulated DTV signals.

- Terrestrial DTV measurements in the field.

- Measurement receiver for lab or field experiments and SDR research.

- Educational tool: Explore DTV standards.

KEY ATTRIBUTES

Parameter		Value
RF input connector		75Ω micro-BNC female
USB port		Type C female
Frequency range		42 .. 3220MHz
8MHz tuner	Bandwidth	0.85, 1.7, 5, 6, 7, 8MHz
	Sample rate	1 .. 40Msps
	Sample size	16bit I + 16bit Q
	Sensitivity	-20 .. -70dBm*
60MHz tuner	Bandwidth	9, 10, …, 59, 60MHz
	Sample rate	5 .. 80Msps
	Sample size	16bit, 10bit (66-80Msps)
	Sensitivity	-20 .. -70dBm*
Power consumption		6.5W max
OS		Windows 10, 11

* Worst case, under certain conditions the sensitivity may be better. For detailed specification, please consult the DTU-331 datasheet.

MODULATION STANDARDS

Standards
ATSC 1.0, ATSC 3.0, DAB(+), DVB-C, DVB-C2, DVB-CID, DVB-S, DVB-T, DVB-T2, I/Q samples, ISDB-T, QAM-B (J.83 Annex B), QAM-C

ORDERING INFORMATION

Type	Description
DTU-331-XPRT	Portable all-standard RF probe for USB-3 with *StreamXpert®* analyzer software
DTU-331-XPRT-SX	Portable all-standard RF probe for USB-3 with *Atsc3Xpert*, *C2/T2Xpert*, and *StreamXpert®* analyzer software.
DTC-344-XPRT	Enables *Atsc3/C2/T2Xpert*, and enables advanced demodulator API for custom applications.

Please refer to **www.dektec.com** for the latest pricing and a list of distributors and resellers.