

DTU-331

Portable All-Standard RF Probe for USB-3

Features

- Fully agile from 42 to 3220MHz, covering VHF, UHF, L-band and a large part of the S-band
- Supports cable, terrestrial and satellite standards
- Tuner, I/Q demodulator and sample-rate converter, optimized for use with SDR technology (Software Defined Radio = demodulation in software)
- Many software demodulators available, including ATSC 3.0 and DVB-T2, with features and measurements exceeding those of consumer demodulator chips
- Hardware sample rate converter for obtaining I/Q samples at a convenient rate
- MER measurements with an accuracy up to 42dB
- Demodulated streams and advanced RF measurements available through free Windows and Linux SDK (DTAPI)
- F and BNC cable assemblies included
- Single USB cable, type-C connectors, supplies power, data and control

Applications

- Portable universal receiver in the lab
- Field measurements with a laptop
- Front end for SDR experiments



Key Attributes

Parameter	Value
RF input connector	75-Ω micro-BNC female
Tuning range	42 to 3220MHz
Input sensitivity	-90 to -20dBm
Input return loss	>10dB @ 0 to 3GHz
I/Q sample size	16-bit I + 16-bit Q
MER measurement	10 to 42dB ±2dB
USB port	USB-3.2 gen 1, type C
OS	Windows 10, 11 Linux ≥2.6.18

Ordering Information

Parameter	Value
DTU-331-XPRT	All-standard SDR receiver with Atsc3Xpert, C2Xpert and T2Xpert
DTU-331-XPRT-SX	All-standard SDR receiver with Atsc3Xpert, C2Xpert and T2Xpert and StreamXpert®

Portable SDR receiver for VHF, UHF and L-band
Several software demodulators available, including ATSC 3.0
USB cable supplies power, data and control

Modulation Standards

Modulation	Standard
ATSC VSB	ATSC A/53E
ATSC 3.0	ATSC A/322
DAB+	EN 300 401
DVB-C	EN 300 429
DVB-C2	EN 302 769
DVB-T	EN 300 744
DVB-T2	EN 302 755
DVB-S	EN 300 421*
DVB-S2	EN 302 307*
DVB-S2X	EN 302 307-2*
ISDB-T/Tsb	ARIB STD-B31
QAM	J.83 Annex A/B/C

* Please check DekTec website for availability