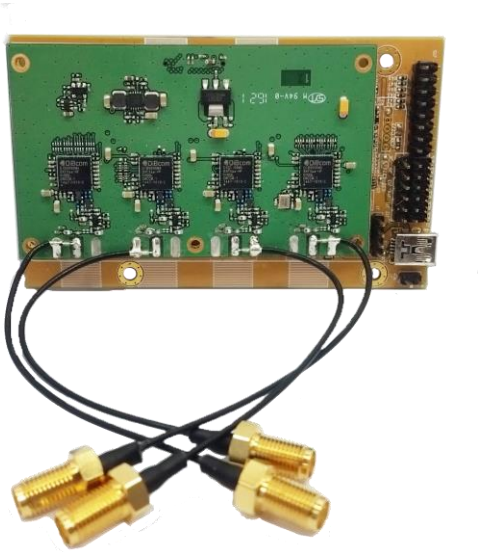
HiDES **Easy HD Expressway!**

UT-164 4-Way Diversity USB DVB-T Receiver Dongle



UT-164 - Features

- USB Receiver Dongle, with integrated 4-way diversity demodulator support for EN 300-744 DVB-T reception.
- **Flexible and wide range channel bandwidth support, 1/1.5/2/2.5/3/4/5/6/7/8 MHz**
- **High monitoring capabilities (Received signal level, MER, C/N, channel profile, BER, MPEG quality, TPS change tracking, remaining adjacent channels power after digital filter)**
- **Superior sensitivity with dual tuner antenna diversity technology for mobile reception with Doppler enhancement.**
- Standard Windows DVB-T BDA driver provided
- Windows Media Center compatible DVB-T TV tuner
- Linux V4L driver support

Host Requirements

- CPU: Intel, AMD, ARM, MIPS
- 128MB RAM of system memory or above
- Higher CPU and memory required if DVB-T audio/video decoding is needed
- One available USB2.0 or 1.1 port
  Note: USB 1.1 can only support 3~5 Mbps stream data rate.

Parameter	Value		
RF connector	Two 50-Ω SMA (female) connecters, for standard TV band 170MHz~862 MHz		
Bandwidth	Single Antenna or 2-Way Diversity (ant-1 & 3)	1/1.5/2/2.5/3/4/5/6/7/8 MHz	
	4-Way Diversity Antenna	2.5/3/4/5/6/7/8 MHz	
FFT	2K, 4K, 8K		
Constellation	64QAM/16QAM/QPSK		
Code rate	1/2, 2/3, 3/4, 5/6, 7/8		
Guard interval	1/4, 1/8, 1/16 or 1/32		
Frequency range	170~862MHz		
RF Performance **(Single Antenna only)**	Pmax	>+5 dBm	
	Pmin @ FFT:2K, 16QAM, CR:2/3 GI:1/8	Bandwidth	Sensitivity
		1 MHz	<-99 dBm
		1.5 MHz	<-98 dBm
		2 MHz	<-96 dBm
		2.5 MHz	<-95 dBm
		3 MHz	<-95 dBm
		4 MHz	<-94 dBm
		5 MHz	<-92 dBm
		6 MHz	<-91 dBm
		7 MHz	<-90 dBm
		8 MHz	<-90 dBm
Mobility Performance RF Level=-50dBm,530MHz 8MHz, C/N=OFF Average Packet Error Rate < $5x10^{-3}$	2K 16QAM R3/4,GI=1/4: 300KM/H 8K 16QAM R2/3,GI=1/4:120KM/H 8K 64QAM R2/3,GI=1/4:80 KM/H		

<table>
<tr><td>Mobility
TU6/RA6/Doppler
Performance</td><td>

Results

Typical Urban Reception (TU6) Results

The following results are the Doppler Frequency to achieve the point of failure of 1 picture artefact or error in a 20 second time period.

Modulation Mode	typ
8K 64QAM, FEC 1/2 and Guard Band 1/8	45Hz
8K 64QAM, FEC 2/3 and Guard Band 1/8	26Hz
2K 64QAM, FEC 2/3 and Guard Band 1/32	128Hz
2K 16QAM, FEC 3/4 and Guard Band 1/32	195Hz

Rural Area Reception (RA6) Results

The following results are the Doppler Frequency to achieve the point of failure of 1 picture artefact or error in a 20 second time period.

Modulation Mode	typ
8K 64QAM, FEC 1/2 and Guard Band 1/8	30Hz
8K 64QAM, FEC 2/3 and Guard Band 1/8	20Hz
2K 64QAM, FEC 2/3 and Guard Band 1/32	86Hz
2K 16QAM, FEC 3/4 and Guard Band 1/32	119Hz

0dB Echo With Doppler Reception (0dB) Results

The following results are the Doppler Frequency to achieve the point of failure of 1 picture artefact or error in a 20 second time period.

Modulation Mode	typ
8K 64QAM, FEC 1/2 and Guard Band 1/8	50Hz
8K 64QAM, FEC 2/3 and Guard Band 1/8	43Hz
2K 64QAM, FEC 2/3 and Guard Band 1/32	160Hz
2K 16QAM, FEC 3/4 and Guard Band 1/32	233Hz

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<tr><td>USB port</td><td>USB 2.0 or USB 1.1</td></tr>
<tr><td>Power</td><td>5V DC, USB bus power, 400mA</td></tr>
<tr><td>Dimensions</td><td>Bare bone 58x96mm</td></tr>
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