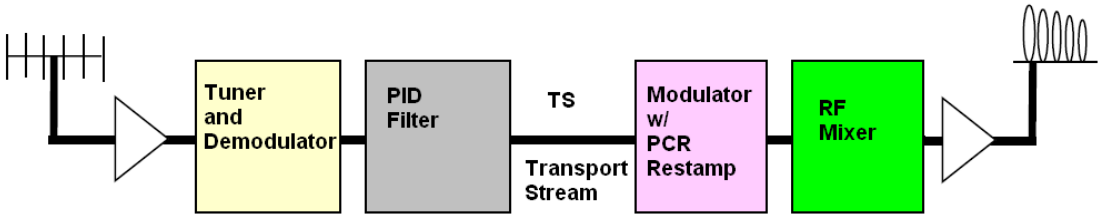
HiDes **Easy HD Expressway!**

BR-100 DVB-T/ISDB-T Digital Gap Filler/Repeater Board

BR-100 - Features

Hardware modulator and demodulator support EN 300-744 DVB-T /ARIB STD-B31 ISDB-T/ABNT NBR 15601 ISDB-Tb reception and retransmission.
TV RF signal is demodulated to a transport stream (TS), and then modulated to a new TV RF signal with fully hardware digital processing without any MER loss or any noise addition.
Built-in 31-way PID filters and PCR re-stamp.
Infinite digital TV signal extension can be achieved with BR-100.



Demodulator (Receiver):

BR-100E supports Digital Terrestrial DVB-T Receptions (5/6/7/8 MHz bandwidth) and amateur HAM DVB-T TV reception (2/3/4 MHz bandwidth)

BR-100J supports Digital Terrestrial ISDB-T/ISDB-Tb Receptions (6/7 MHz bandwidth)

Modulator (Transmitter):

Direct digital conversion to 50~950MHz and 1200~1350 MHz for excellent signal quality
BR-100E supports configurable bandwidth from 2MHz to 8 MHz.

BR-100J supports configurable bandwidth 6/7/8 MHz.

BR-100 - Applications

DVB-T/ISDB-T digital TV signal repeater/extender
DVB-T/ISDB-T closed circuit TV gap filler

- Air to Cable/Cable to Air/Air to Air/Cable to Cable TV signal repeater

Parameter	Value		
RF connector	Tx: 75-Ω F (female) connecter Rx: 75-Ω IEC (female) connecter		
Bandwidth	Transmitter	BR-100E	DVB-T 2/3/4/5/6/7/8 MHz
		BR-100J	ISDB-T/Tb 6/7/8 MHz
	Receiver	BR-100E	DVB-T 2/3/4 MHz or 5/6/7/8MHz *1
		BR-100J	ISDB-T/Tb 6/7 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	Transmitter	50~950MHz and 1200~1350MHz step size 1KHz	
	Receiver	50~950MHz, step size 1KHz	
RF Output Level	-4 dBm (104 dBuV) @ 50~950MHz -45dBm @ 1.2G band *2		
Digital Attenuator	Range:+6/-25dB*3 , Step size 1dB		
MER	>30dB Typically		
Spectrum Shoulder (Adjacent channel)	45dB		
Phase noise	<-92dBc @ 10kHz		
Carrier Suppression	>42dB		
USB port	USB 2.0 or USB 1.1		
Power	5V DC 390mA		

Dimensions (LxWxH)	100x 130 x 35mm

Note:

*1 : Bandwidth 2/3/4 MHz or 5/6/7/8 MHz are selected by a jumper.

*2 :The U-band low pass filter is designed @950MHz, so 1.2G band power is filtered to such a low level.

*3:There could be MER loss in high gain/attenuation level.

Gap Filler Application: