

### Channel Config

The page to configure VDSL2 Max Interleave Delay, Min. INP(Impules Noise Protection), Force INP and Target SNRM ( Enable Force INP, Max Interleave Delay must be increased also.) The default value of interleave is auto. If you want to get the max throughput, you can set the value of interleave to 1. However, the capability of anti-interference will be reduced.

## VDSL2 Channel Config

Port	Max Interleave Delay	Min INP	Force INP	Target SNRM (dB)
Port 1				
Port 2				
Port 3	1 ms	0	Disable	6db
Port 4				

Apply

Bei schlechteren Leitungen:  
 Max Interleave Delay = 40  
 Min INP=8  
 Force INP= Enable  
 Target SNRM=9db

Port	Max Interleave Delay	Min INP	Force INP	Target SNRM (dB)
1	1	0	Disable	6
2	2	2	Enable	6
3	2	6	Enable	6
4	1	0	Disable	6
5	1	0	Disable	6
6	1	0	Disable	6
7	1	0	Disable	6
8	1	0	Disable	6

**Max Interleave Delay:** Regarding the interleave delay value time function for anti-noise purpose, due to the noise of each environment are different, therefore you can configure interleave delay value when filed environment has heavy noise.

**Min INP (Impulse Noise Protection):** Impulse noise in multicarrier communication systems behaves effectively as a modulating signal that controls the first moment of the background Gaussian noise. The composite noise, which is the aggregate of the Gaussian noise and impulse noise, has a probability density function that is conditionally Gaussian with non-zero average, hence referred to as biased-Gaussian. The BER-equivalent power of the composite noise source is defined as the power of a pure Gaussian noise source that yields the same bit-error rate (BER). The BER-equivalent noise for a biased-Gaussian noise is simply the amplified version of the underlying Gaussian noise source. The amplification factor is derived from the characteristics of the impulse interference. Any bit-loading algorithm designed for Gaussian noise sources is also applicable to biased-Gaussian noise sources provided that the BER-equivalent SNR is used in place of the measured SNR.

**Froce INP (ITU-T G997.1):** This parameter indicates that the framer settings of the bearer shall be selected such that the impulse noise protection computed according to the formula specified in the relevant Recommendation is greater than or equal to the minimal impulse noise protection requirement.

This flag shall have the same value for all the bearers of one line in the same direction.

**Target SNRM:** Noise Margin is the non-technical term for Signal to Noise Ratio Margin (SNRM). Domestic standard modems and VDSL2 routers often use the terms Noise Margin or SNR when reporting on its value. The Signal to Noise Ratio, as its name implies, is the ratio between the strength of the signal and the level of noise on the line.

That ratio is a major factor in determining the connection speed, as the higher the ratio the higher the possible speed. The SNRM is a margin which by which the noise level can rise before connection is lost.

Taking the default (target) value of 6 dB applied is follow up telecom standard. Basically, you don't need configure this value.

**Notes:**

1. Interleave delay value must greater than or equal to INP value, otherwise VDSL2 will not establish a connection.
2. Please note you must deactivate then activate once on config port when you configure VDSL2 channel config.
3. Please note that increase interleave delay time will reduce few vdsl2 bandwidth and depending on interleave delay time.