

Active Input Splitter

The Active Input Splitters are devices that separate the radio-electric channels that we want to repeat and that are received from a single antenna input. They have 3, 6 or 9 ways and are conceived for those cases in which the level of the signals after the antenna is very low. If we want to preserve the output signal-to-noise ratio, we will have to use this kind of devices when the power after the antenna is lower than -45dBm.

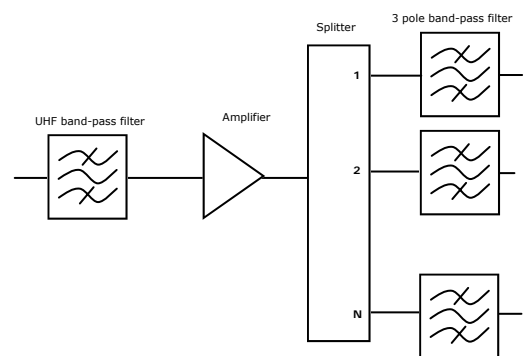
These Input Splitters are made up of the cascade of a band-pass filter from 470 to 860 MHz, a low noise and high IP3 amplifier, a 3, 6 or 9 ways passive splitter and the RF band-pass filters needed for every single channel.

The band-pass filter from 470 to 860 MHz has low losses and high rejection to signals that are different from the television broadcasting system, preventing that the input amplifier intermodulates in the presence of not desired and very strong signals.

The low noise amplifier guarantees the low global noise figure in the installation with its high gain independently of the losses that there will be later.

The internal splitter presents low resistive losses-in addition to the distribution ones- and high isolation between ports.

The band-pass filter for every single channel has a 3-pole comb-line structure. The intermediate frequency is 70 MHz in Wish Soluciones repeater equipments, ensuring high rejection to the image frequency with the use of this kind of filters. On the other hand these filters guarantee high isolation between repeater equipments avoiding possible interference signals between them (like the local oscillator residues). They also offer high selectivity to all kind of signals (TV channels that are remote enough, FM, base stations...).

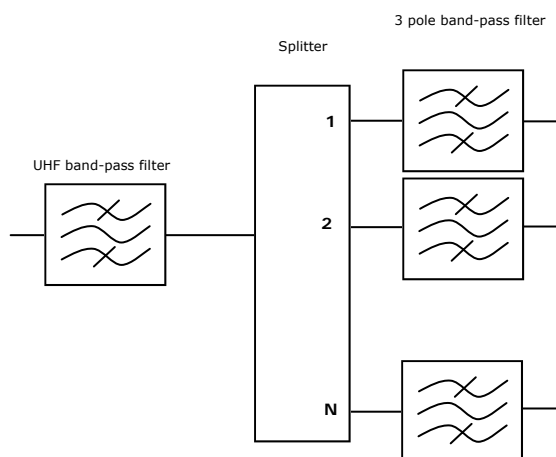


Technical Specifications

Active Input Splitters			
	3 way	6 way	9 way
Identifier	WSDA33P	WSDA63P	WSDA93P
Frequency range		470 - 860 MHz	
Gain	12 dB	10 dB	8 dB
Noise Figure	4,10 dB	4,15 dB	4,25 dB
Maximum input power		100 mW	
Isolation between outputs	25 dB	25 dB	25 dB
I/O Matching		20 dB	
Supply		+15 V	
Consumption		75 mA	
Impedance		50 Ω	
Connectors		SMA female	
Dimensions		3 units high in 19" rack	

Passive Input Splitter

The Passive Input Splitters are devices that separate the radio-electric channels that we want to repeat and that are received from a single antenna input. They have 3, 6 or 9 ways and are conceived for those cases in which the level of the signals after the antenna is reasonably high (over -45 dBm).



These Input Splitters are made up of the cascade of a band-pass filter from 470 to 860 MHz, a 3, 6 or 9 ways passive splitter and the RF band-pass filters needed for every single channel.

The band-pass filter from 470 to 860 MHz has low losses and high rejection to signals that are different from the television broadcasting system preventing them to come in the splitter.

The internal splitter presents low resistive losses-in addition to the distribution ones- and high isolation between ports.

The band-pass filter for every single channel has a 3-pole comb-line structure. The intermediate frequency is 70 MHz in Wish Soluciones repeater equipments, ensuring high rejection to the image frequency with the use of this kind of filters. On the other hand these filters guarantee high isolation between repeater equipments avoiding possible interference signals between them (like the local oscillator residues). They also offer high selectivity to all kind of signals (TV channels that are remote enough, FM, base stations...).

Technical Specifications

Passive Input Splitters			
	3 way	6 way	9 way
Identifier	WSDP33P	WSDP63P	WSDP93P
Frequency range	470 - 860 MHz		
Insertion loss (input filter + splitter + output filter)	8 dB	10 dB	12 dB
Noise Figure	8 dB	10 dB	12 dB
Maximum input power	500 mW		
Isolation between outputs	25 dB	25 dB	25 dB
I/O Matching	20 dB		
Impedance	50 Ω		
Connectors	SMA female		
Dimensions	3 units high in 19" rack		