



Distribution amplifiers

Line distribution amplifiers

- GaAs push-pull technology
- flexibility provided by plug-in return path dipoles
- plug-in interstage attenuator and equalizer for improving amplifier performance
- plug-in inverse equalizer
- weatherproof and RF-screened die-cast housing
- switch-mode power supply unit
- possibility to inject supply voltage for remote powering (DA1XX)
- transient protection at inputs and outputs



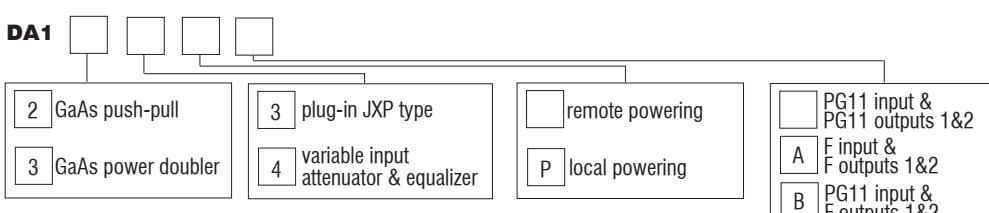
Technical specifications		DA12X	DA12XP	DA13X	DA13XP
Type					
Frequency range*			47/75/87-862 MHz		
Return path*			5-30/55/65 MHz		
Input and output impedance			75 Ω		
Gain, 20°C			36 dB		
Flatness			± 0.75 dB		
Input and output return loss			18 dB/40 MHz-1.5 dB/octave		
Input attenuator			0-18 dB		
Input cable equalizer			0-18 dB		
Inverse cable equalizer			0-9 dB in 1 dB step		
Noise figure			max. 6 dB		
Output level CTB (EN50083-3)**		108 dBμV (42 ch.)		111 dBμV (42 ch.)	
Output level CSO (EN50083-3)**		110 dBμV (42 ch.)		112 dBμV (42 ch.)	
Mains voltage	24-65 V~ 50 Hz	187-250 V~ 50 Hz	24-65 V~ 50 Hz	187-250 V~ 50 Hz	
Power consumption	max. 12.5 W	max. 11 W	max. 15.5 W	max. 13.5 W	
Current consumption	24 V AC 42 V AC 65 V AC	0.77 A 0.49 A 0.36 A	-	0.94 A 0.59 A 0.43 A	-
Maximal AC pass current			4 A		
Loss in internal input test point (bi-directional)			-20 ± 2.0 dB		
Loss in internal output test point (directional)			-20 ± 0.5 dB		
Input and outputs connectors***			PG11 or F		
Test point connectors			F		
Hum modulation distance (4 A)			min. 65 dB		
Operating temperature range			-20° + + 50° C		
Dimensions/Weight (packed)	180x125x76 mm (main body); 213x125x76 mm (with fixing ears)/1.4 kg				

* frequency range depends on inserted plug-in diplexer

** output level (CTB, CSO) is measured with 6 dB interstage equalizer

*** the amplifier is available with input or output connectors PG11 thread or F female

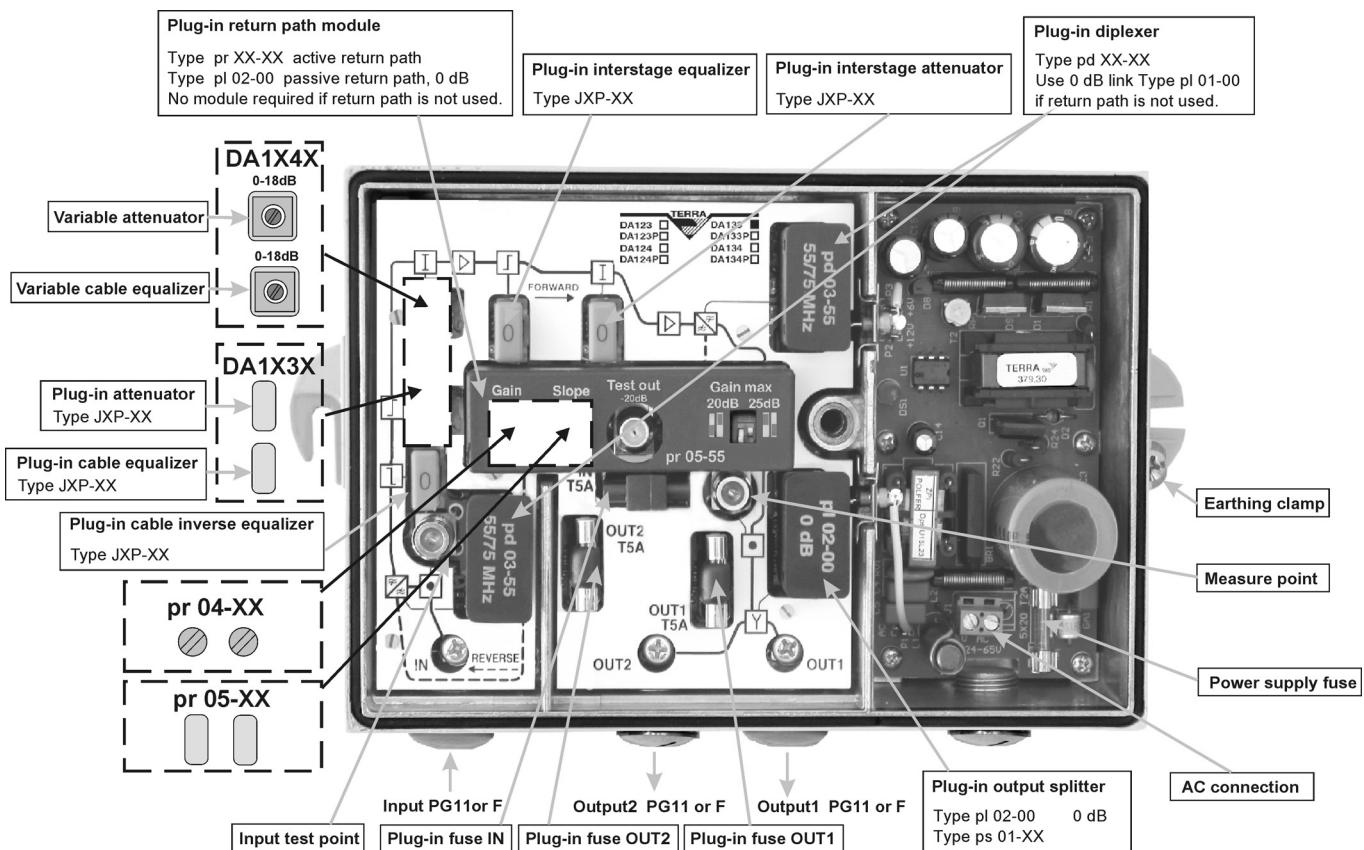
All parameters are measured with links pl 01-00 instead of return path dipoles; pl 02-00 instead of plug-in output splitter; JXP-0 instead of input attenuator, cable equalizer, cable inverse equalizer; interstage attenuator and cable equalizer.



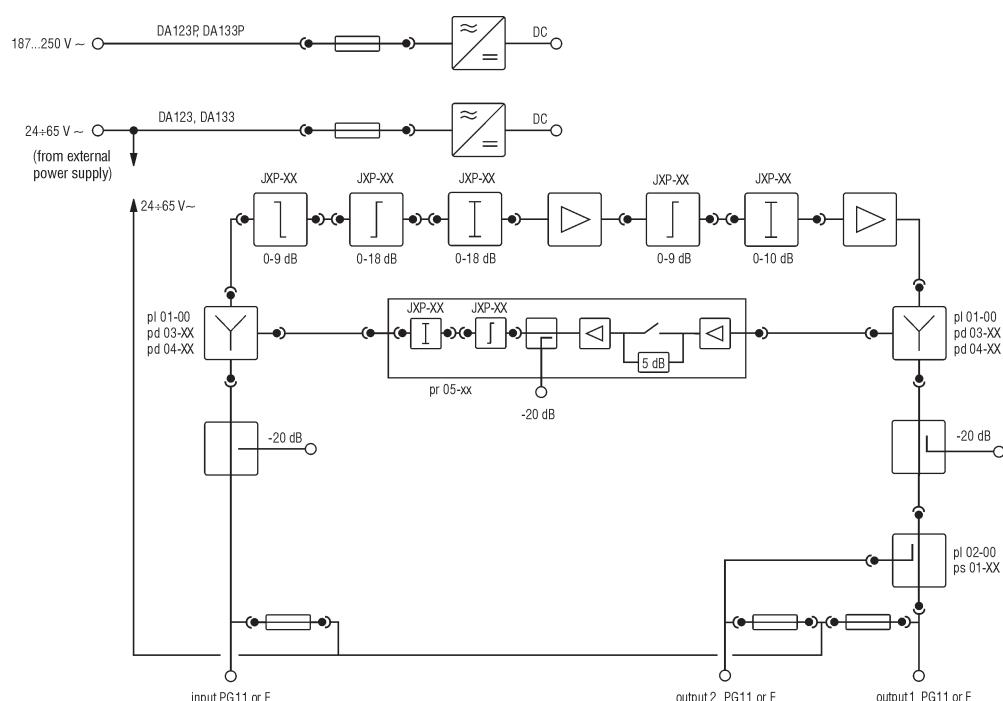


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Structure diagram of DA1X3X

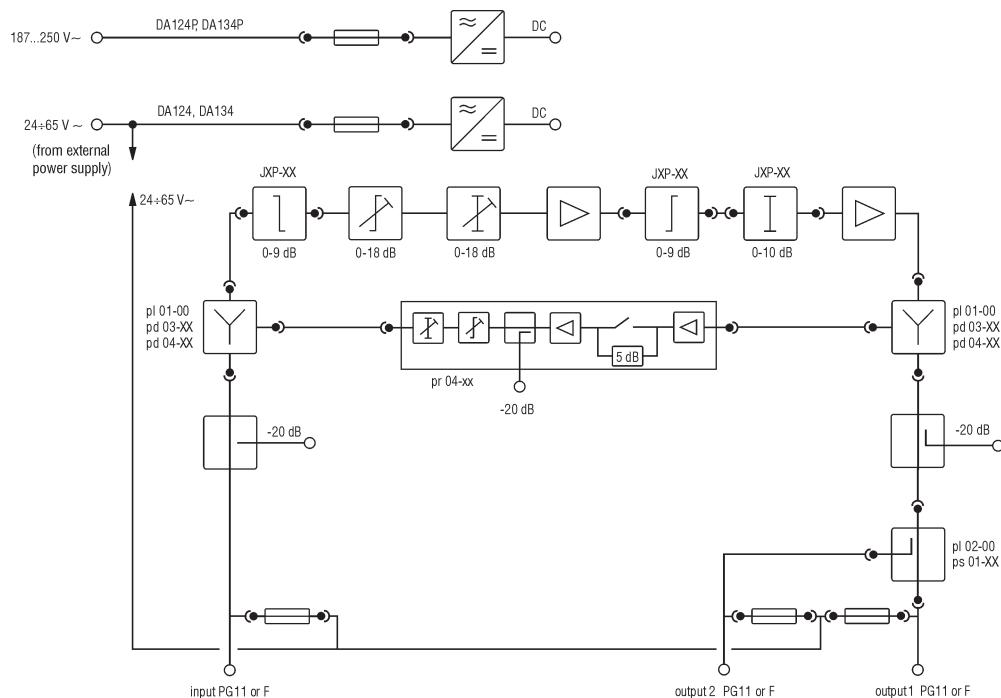




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Structure diagram of DA1X4X



Ordering notes

Band	no return path 30/47 MHz 55/75 MHz 65/87 MHz	2 x pl 01-00 2 x pd 03-30 (pd 04-30) 2 x pd 03-55 (pd 04-55) 2 x pd 03-65 (pd 04-65)	Ordering number	
Output	0 dB output1/no output 2 3.5 dB output1/3.5 dB output2 2.0 dB output1/6.0 dB output2 1.5 dB output1/10 dB output2 1.0 dB output1/14 dB output2 0.5 dB output1/18 dB output2	pl 01-00 ps 01-03 ps 01-06 ps 01-10 ps 01-14 ps 01-18	DA123 DA123-A DA123-B DA123P DA123P-A DA123P-B	11840 11886 11887 11842 11890 11891
Return path	0 dB passive 20/25 dB gain 30 MHz, variable adjustments 20/25 dB gain 55 MHz, variable adjustments 20/25 dB gain 65 MHz, variable adjustments 20/25 dB gain 30 MHz, plug-in adjustments 20/25 dB gain 55 MHz, plug-in adjustments 20/25 dB gain 65 MHz, plug-in adjustments	pl 02-00 pr 04-30 pr 04-55 pr 04-65 pr 05-30, JXP-XX pr 05-55, JXP-XX pr 05-65, JXP-XX	DA124 DA124-A DA124-B DA124P DA124P-A DA124P-B DA133 DA133-A DA133-B DA133P DA133P-A DA133P-B DA134 DA134-A DA134-B DA134P DA134P-A DA134P-B	11841 11888 11889 11843 11892 11893 11844 11894 11895 11846 11898 11899 11845 11896 11897 11847 12801 12802
Input adjustments	cable simulator 0÷9 dB by 1 dB step attenuator 0÷20 dB by 1 dB step (for DA1X3X only) equalizer 0÷20 dB by 1 dB step (for DA1X3X only)	JXP-XX JXP-XX JXP-XX		
Interstage	attenuator 0÷10 dB by 1 dB step equalizer 0÷9 dB by 1 dB step	JXP-XX JXP-XX		