



# House amplifiers Apartament amplifiers

- amplifiers with two outputs (AS034 - with three outputs) for small apartment networks
- built-in power supply
- shielded metal case inside of the plastic housing

**AS033, AS034**  
broadband amplifier with gain adjustment

**AS033R30, AS033R65**  
return path 30 MHz and 65 MHz

**HS013A, HS014A**  
splitband amplifier with separate gain adjustment in VHF and UHF ranges



### Technical specifications

T Y P E		AS033	AS033R30	AS033R65	AS034	HS013A	HS014A
Ordering number		00552	00554	00553	00558	01588A	10542
Frequency range	forward path	47-862 MHz		87-862 MHz	47-862 MHz	47-400/470-862 MHz	
	return path	-	5-30 MHz	5-65 MHz	-	-	
Gain*		16 dB/47 MHz; 20 dB/862 MHz				22 dB	VHF 12 dB UHF 22 dB
Gain adjustment		0 ± 16 dB				VHF 0 ± 15 dB; UHF 0 ± 12 dB	
Maximal output level IMD3 = 60 dB (DIN45004B)		104 dBμV*				103 dBμV*	
Maximal output level IMD2 = 60 dB (EN50083-3)		95 dBμV					
Noise figure		< 7 dB				VHF < 4.5 dB; UHF < 3dB	
Power consumption		230 V/50 Hz/3 W					
Operating temperature range		-20° ± +50° C					
Dimensions/Weight (packed)		78x118x47 mm/0.36 kg					

\* when loaded other symmetrical output (AS034 - two symmetrical outputs, third -6 dB)

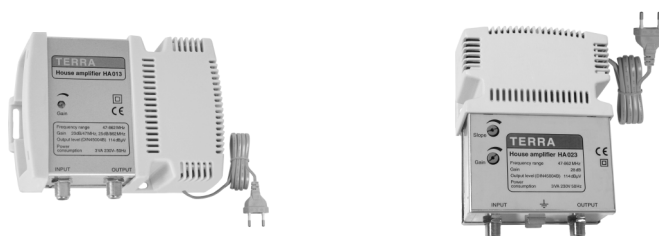
# Medium power amplifiers

- suitable for small and medium size in-house distribution networks
- push-pull technology
- built-in power supply
- metal-plastic housing

**HA013**  
fixed 5 dB slope pre-correction and adjustable gain regulator

**HA023**  
adjustable gain & slope regulators

**HA023R30, HA023R65**  
return path 30 MHz and 65 MHz



### Technical specifications

T Y P E		HA013	HA023	HA023R30	HA023R65
Ordering number		10507	10508	10509	10510
Frequency range	forward path	47-862 MHz			87-862 MHz
	return path	-	-	5-30 MHz	5-65 MHz
Gain		20 dB/47 MHz; 25 dB/862 MHz		28 dB	
Frequency response		± 0.7 dB	± 0.5 dB	± 0.7 dB	
Gain adjustment		15 dB		20 dB	
Slope adjustment, typical		-		18 dB	
Maximal output level IMD3 = 60 dB (DIN45004B)				114 dBμV	
Maximal output level IMD2 = 60 dB (EN50083-3)				108 dBμV	
Input and output return loss		> 10 dB		> 14 dB*	
Noise figure				< 7 dB	
Power consumption				230 V/50 Hz/3.5 W	
Operating temperature range				-20° ± +50° C	
Dimensions/Weight (packed)		96x129x50 mm/0.45 kg		88x128x50 mm/0.5 kg	

\* when f ≥ 40 MHz, return loss ≥ 14 dB (40 MHz) - 1.5 dB/octave, but not less 10 dB