



## More Power for Your Distribution Team

| The New GHV Amplifier Series



[www.triax.com](http://www.triax.com)  
www.triax.com

**Triax A/S**  
Bjørnkærvej 3 • 8783 Hornsyld • Denmark  
[triax@triax.dk](mailto:triax@triax.dk)  
[www.triax.dk](http://www.triax.dk)

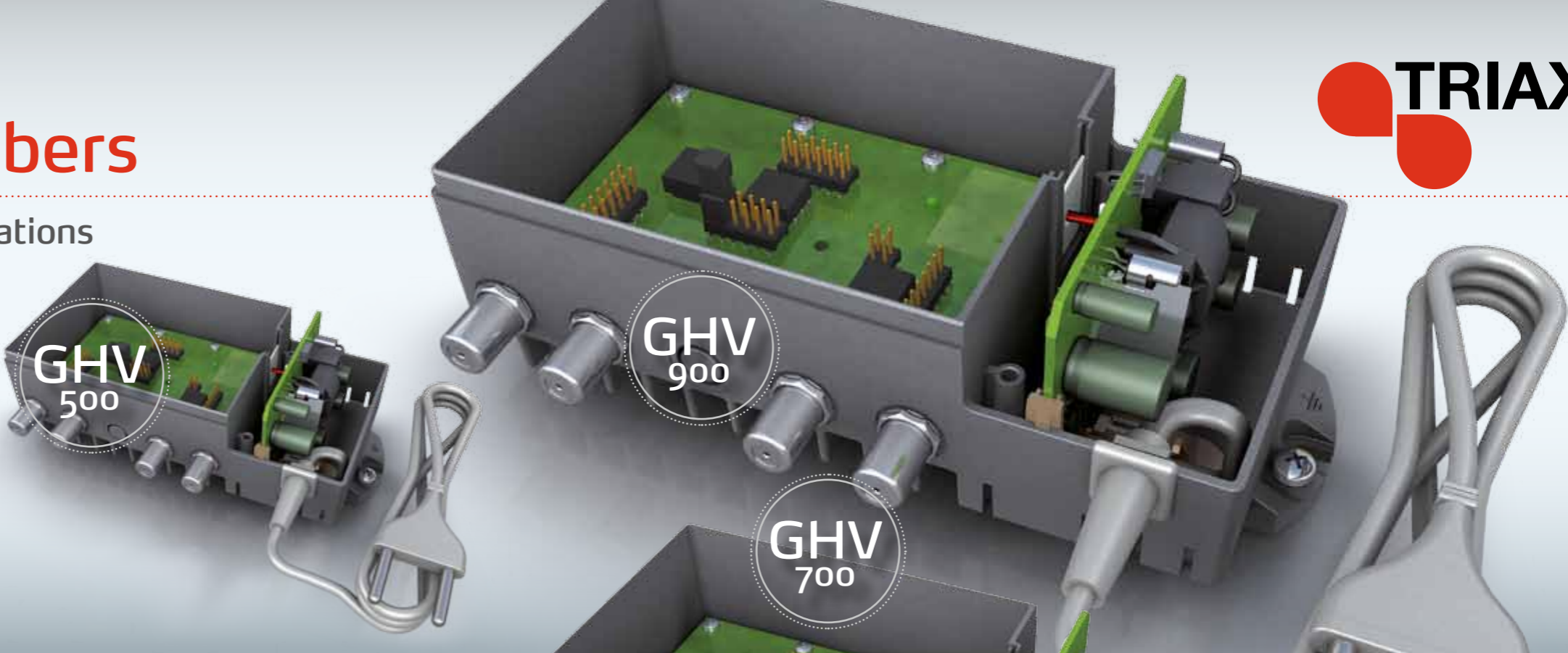


your ultimate connection

# New team members



House amplifiers for all applications



This is the start of a new, comprehensive range of amplifiers from Triax.

It's easy to find the right one for your application. You can choose from three series with various amplification values and additional features.

Triax offers a new house amplifier range for supplying signals to small and mid-sized buildings. The new GHV series features a compact design while still being modular. This lets you choose from a wide variety of types to optimally meet all of your customers' needs – all over the map.

These products all excel with outstanding transmission characteristics and ease of installation. And no matter which one you choose, you can count on the excellent quality and service that Triax is famous for.

## TRIAX GHV 520 P

AMPLIFIER TYPE		SERIES	AMPLIFICATION (dB)				ADDITIONAL ATTRIBUTES P = potentiometer R = rotary switch		YOUR AMPLIFIER
House amplifiers for small distribution networks	GHV	500	20	30	35	40	P	R	TRIAX GHV 520 P TRIAX GHV 530 P
			■	■			■		
				■			■		
					■				
		700	■	■	■	■		■	TRIAX GHV 720 TRIAX GHV 730 TRIAX GHV 735 TRIAX GHV 740
				■	■	■		■	
					■	■		■	
						■		■	
		900	■	■	■	■		■	TRIAX GHV 920 TRIAX GHV 930 TRIAX GHV 935 TRIAX GHV 940
				■	■	■		■	
					■	■		■	
						■		■	

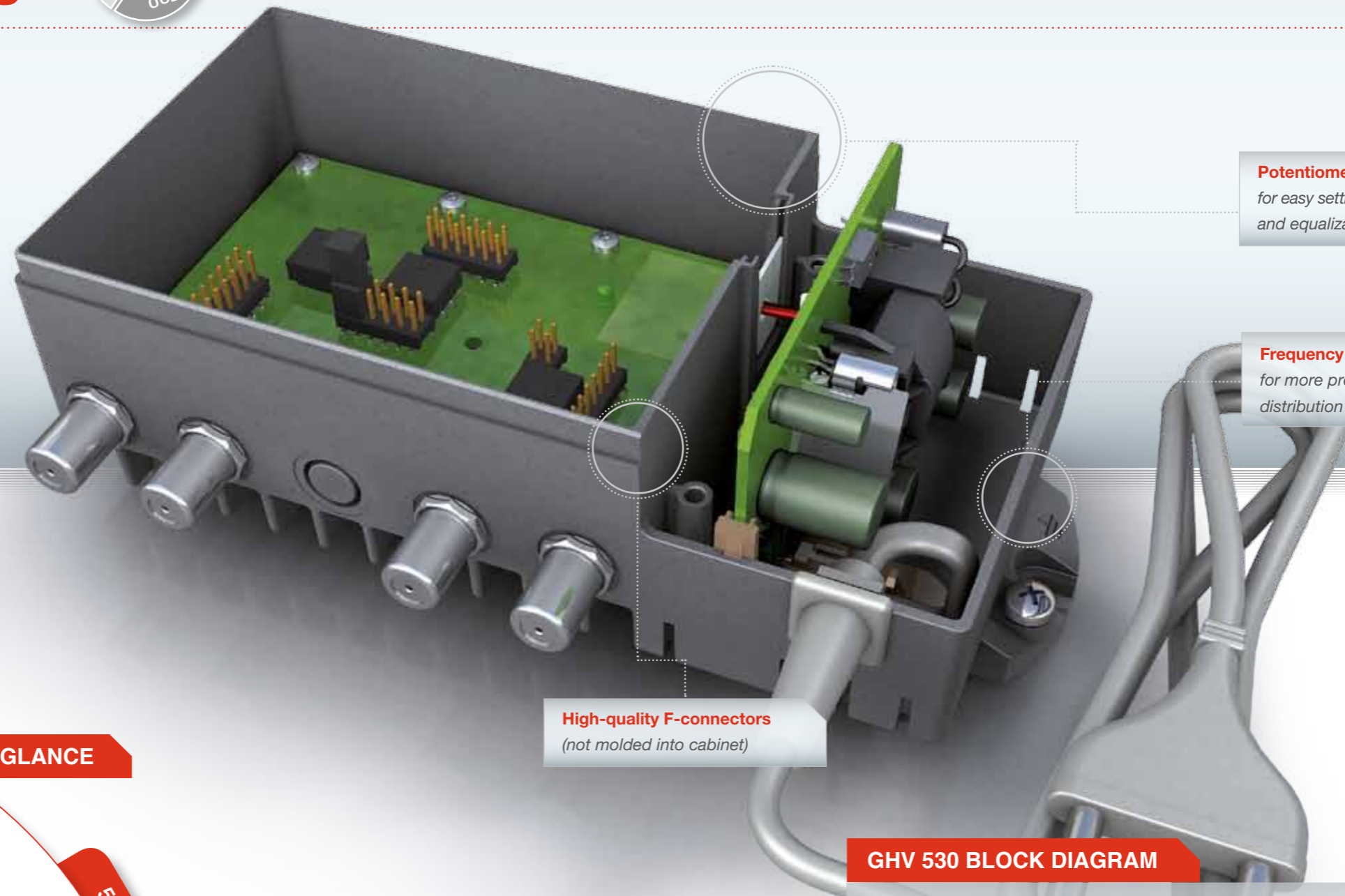
	500 SERIES	700 SERIES	900 SERIES
■ Optimized 1 GHz technology	■	■	■
■ Potentiometer (P)	■		
■ 16 step rotary switches for attenuation and equalization		■	■
■ Return channel (5-65 MHz)		Passive	Active/passive
■ All-on-board return path technology (no additional modules needed)			■
■ Plug-in modules		ARA Diplex/RC	ARA Diplex/RC
■ -20dB input and output test connectors		■	■
■ Extensive ESD and surge protection	■	■	■
■ Low power consumption	■	■	■

# GHV 500 Series



## House amplifier for small buildings

The GHV 500 series is designed for use in distribution networks in small buildings where no return path is needed. Potentiometers allow easy setting of attenuation and equalization.



**Potentiometer**  
for easy setting of cable attenuation  
and equalization.

**Frequency linearity +/- 1dB**  
for more precise, uniform  
distribution levels.

**High-quality F-connectors**  
(not molded into cabinet)

### BENEFITS OF THE GHV AMPLIFIERS AT A GLANCE

900

- All-on-board return path technology
- ve return channel
- plug-in modules to replace d return path
- exer
- rsions are:

#### COMMON FEATURES

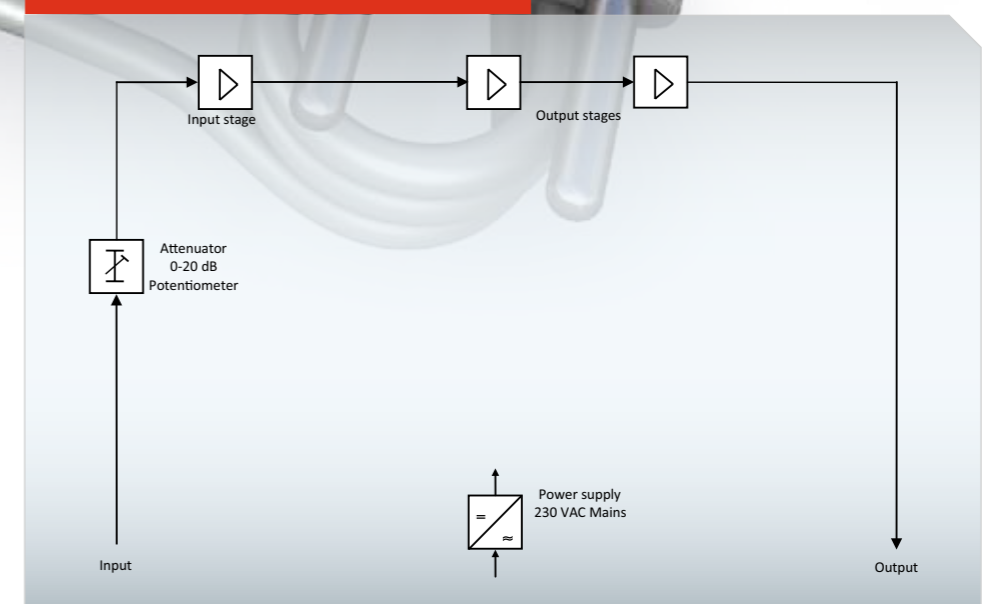
- Optimized 1 GHz technology
  - High gain (20-30dB)
  - F-connectors (female)
- Built-in energy-saving mains-fed power supply
- Extensive ESD and surge protection

#### ■ Potentiometers (P)

#### ■ Available versions:

- GHV 520 P with 20dB amplification
- GHV 530 P with 30dB amplification

### GHV 530 BLOCK DIAGRAM

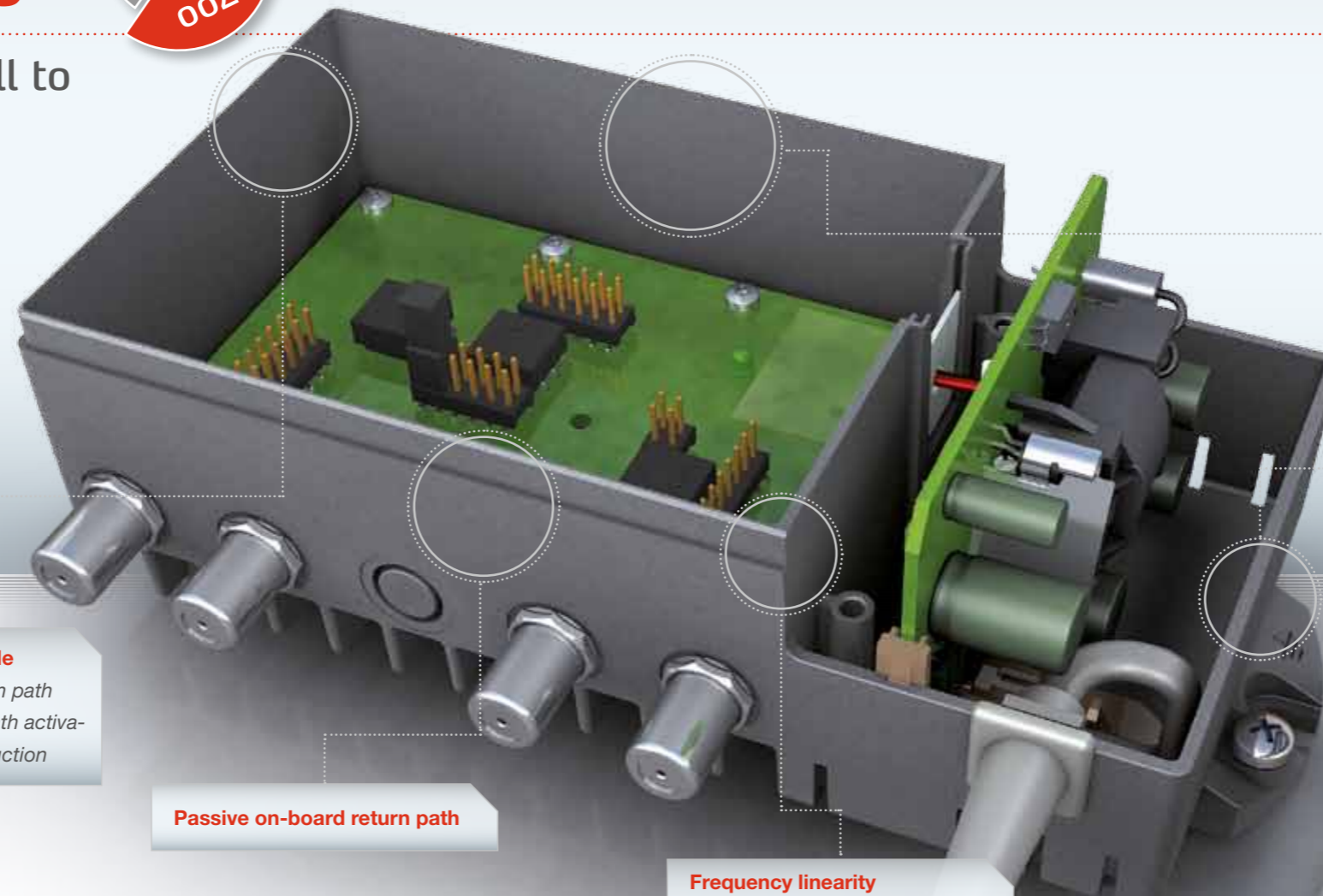


# GHV 700 Series



## Mid-range amplifier for small to mid-sized buildings

The GPV 700 series house amplifier has a modular design with passive return path, yet is also fully configurable using plug-in modules. Rotary switches and jumpers provide for readable, easy, and reproducible setting of cable simulation, attenuation, and equalization, maintaining an unbreakable signal path both downstream and upstream to prevent downtimes.



**Optional plug-in module**  
for 23/32dB active return path  
with automatic return path activa-  
tion (ARA) for noise reduction

**Passive on-board return path**

**Frequency linearity**  
+/- 1dB for more precise, uniform  
distribution levels

**Adjustable attenuation and  
equalization settings**  
in 1dB steps using rotary switches  
and jumpers for readable, easy,  
and reproducible settings

**High-quality F-connectors**  
(not molded into cabinet)  
including measurement port

### BENEFITS OF THE GHV AMPLIFIERS AT A GLANCE

■ Passive return  
channel (5-65 MHz)

■ Optional plug-in modules  
for active return channel  
and automatic return path  
activation (ARA)

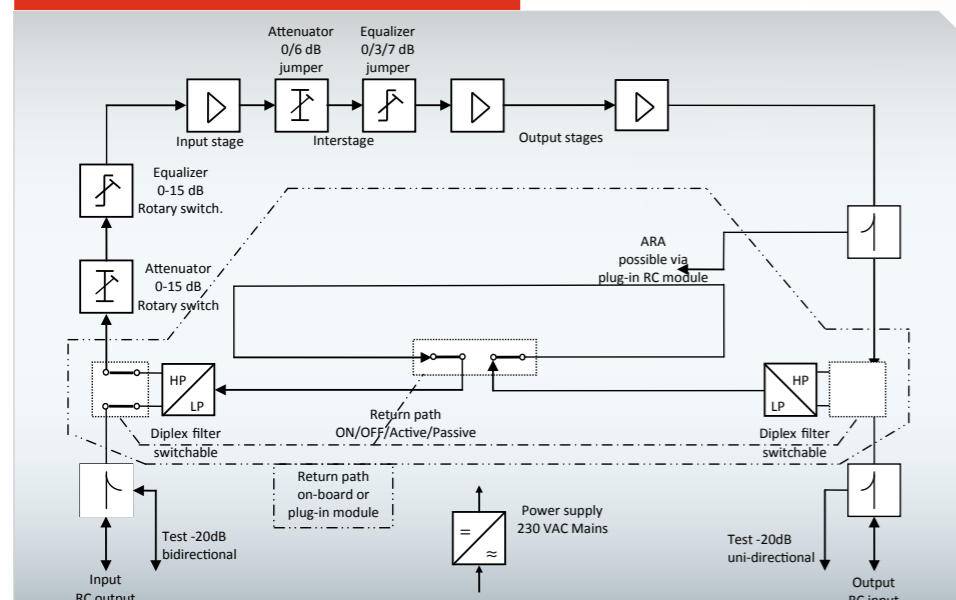
#### Available versions:

- GHV 720 with 20dB amplification
- GHV 730 with 30dB amplification
- GHV 735 with 35dB amplification
- GHV 740 with 40dB amplification

#### COMMON FEATURES

- Optimized 1 GHz technology
- High gain (20-30dB)
- F-connectors (female)
- Built-in energy-saving mains-fed power supply
- Extensive ESD and surge protection

### GHV 735 BLOCK DIAGRAM

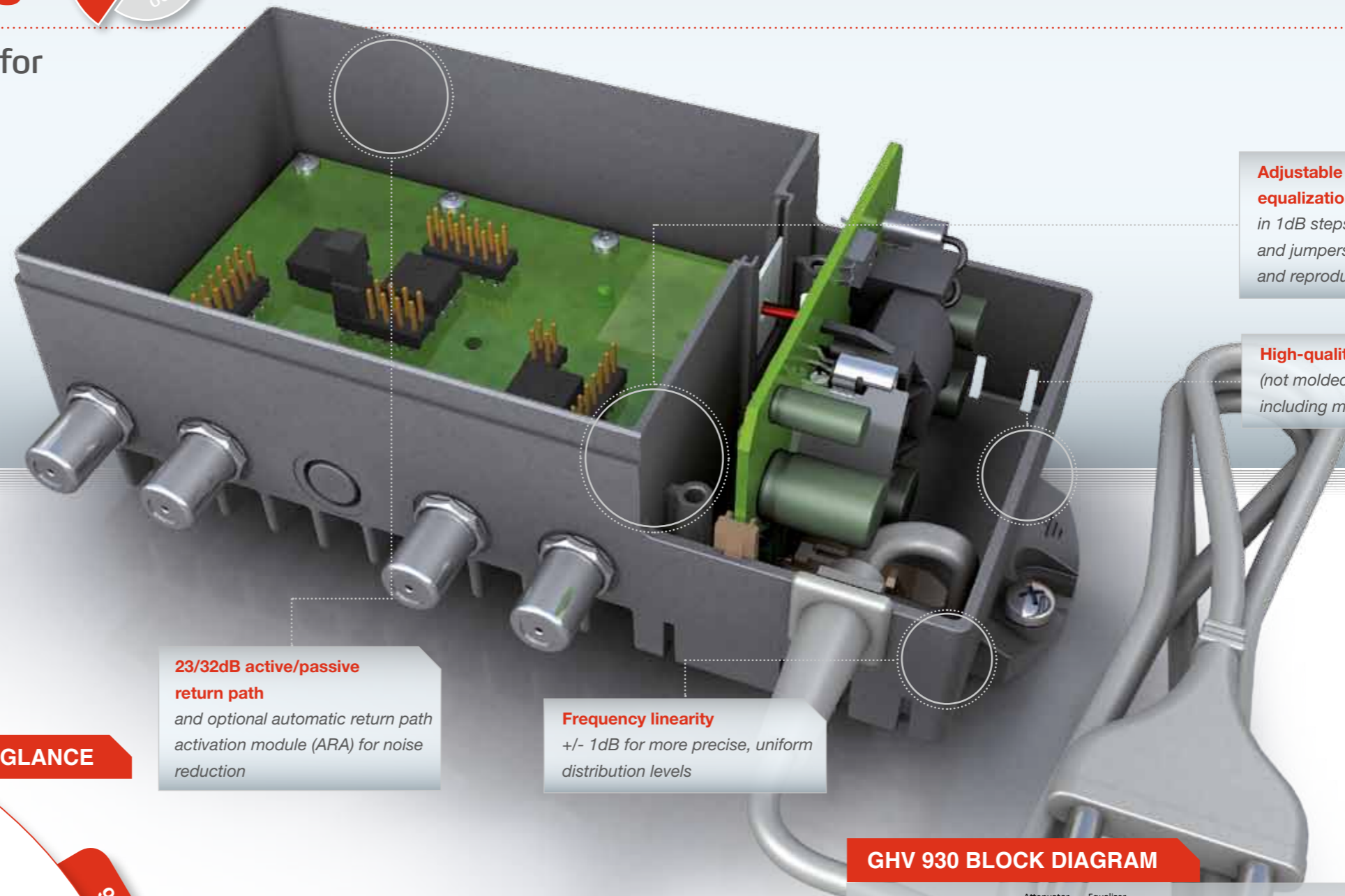


# GHV 900 Series



## High-performance amplifier for small to mid-sized buildings

The GHV 900 series house amplifier has a modular design with active/passive return path all-on-board for easy setting and installation. An optional plug-in module for automatic return path activation (ARA) is also available. Rotary switches and jumpers provide for readable, easy, and reproducible setting of attenuation and equalization, maintaining an unbreakable signal path both downstream and upstream to prevent downtimes.



**Adjustable attenuation and equalization settings**  
in 1dB steps using rotary switches and jumpers for readable, easy, and reproducible settings

**High-quality F-connectors**  
(not molded into cabinet) including measurement port

**23/32dB active/passive return path**  
and optional automatic return path activation module (ARA) for noise reduction

**Frequency linearity**  
+/- 1dB for more precise, uniform distribution levels

### BENEFITS OF THE GHV AMPLIFIERS AT A GLANCE

- All-on-board active/passive return path technology
- Active return channel
- Optional plug-in module to enable the automatic return path activation

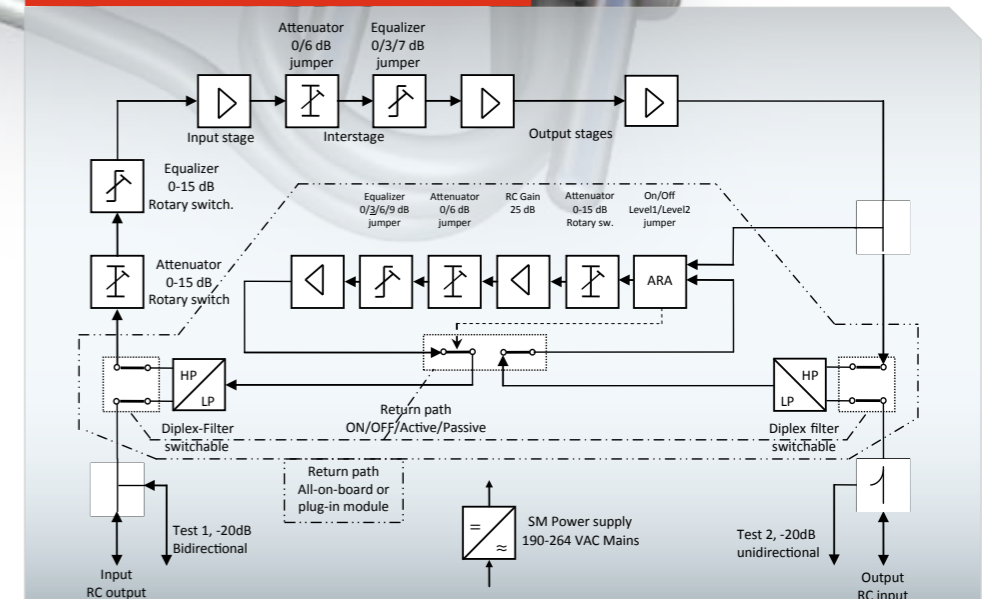
#### Available versions:

- GHV 920 with 20dB amplification
- GHV 930 with 30dB amplification
- GHV 935 with 35dB amplification
- GHV 940 with 40dB amplification

#### COMMON FEATURES

- Optimized 1 GHz technology
- High gain (20-30dB)
- F-connectors (female)
- Built-in energy-saving mains-fed power supply
- Extensive ESD and surge protection

### GHV 930 BLOCK DIAGRAM

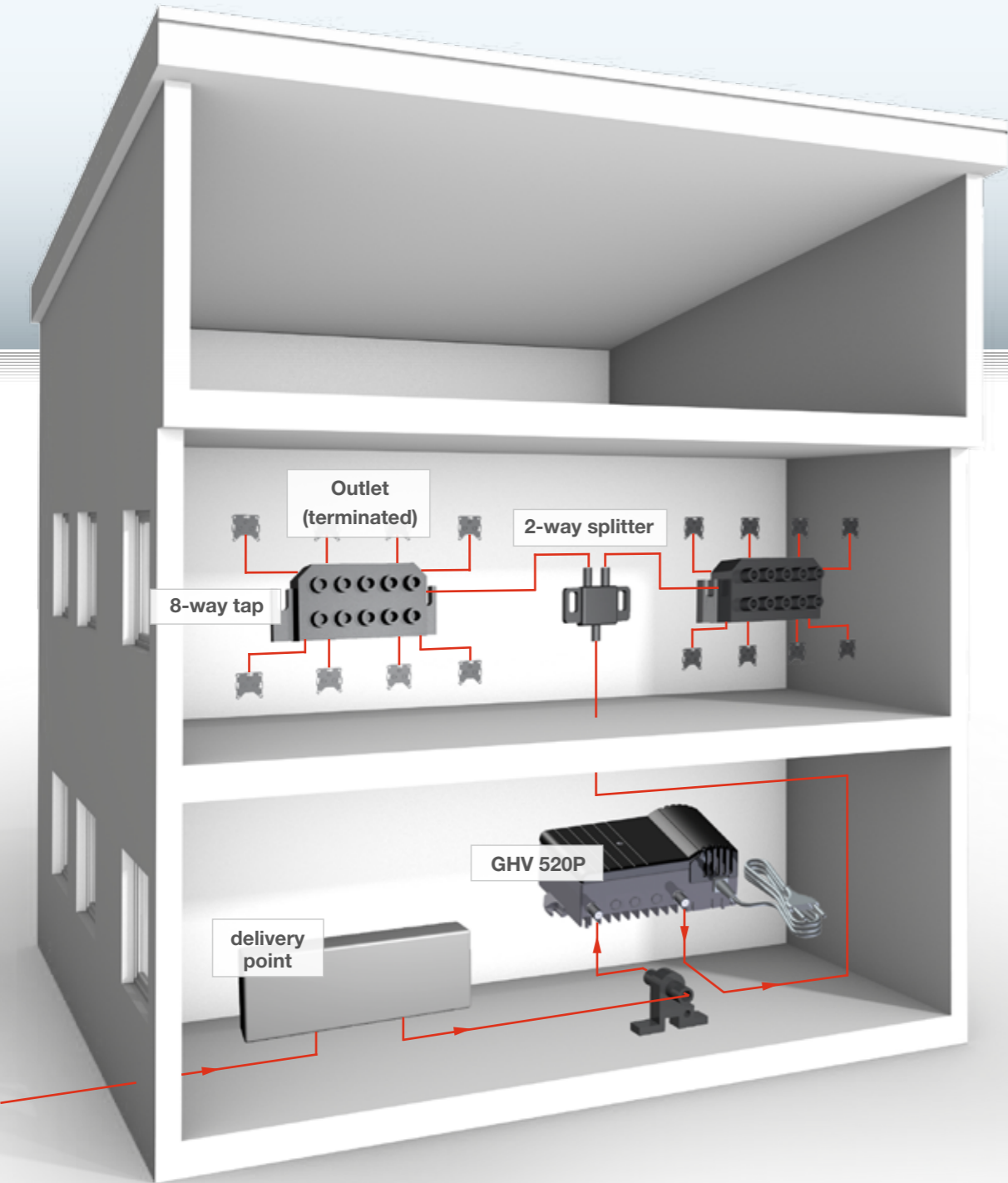


# A Team play

Application of house amplifiers

# The Power at a Glance

Technical Specifications of All GHV Amplifiers



Type	Triax GHV									
Type	GHV 520 P	GHV 530 P	GHV 720	GHV 730	GHV 735	GHV 740	GHV 920	GHV 930	GHV 935	GHV 940
Art No.	323138	323142	323148	323156	323160	323164	323150	323158	323162	323166
Frequency range										
Forward path/Forward path w. return on	MHz	47-1006	47-1006	47-1006 85-1006	47-1006 85-1006	47-1006 85-1006	47-1006 85-1006	47-1006 85-1006	47-1006 85-1006	47-1006 85-1006
Return path	MHz	-	-	5-65	5-65	5-65	5-65	5-65	5-65	5-65
Gain forward										
Gain @ 1006 MHz	dB	21	30	21	33	35	40	20	30	35
Gain low/hi jumper	dB	-	-	-	-	-	-	-	-	-
Input attenuator - 1dB step (rotary switch)	dB	0-20 (pot.)	0-20 (pot.)	0-15	0-15	0-15	0-15	0-15	0-15	0-15
Input equalizer - 1dB step (rotary switch)	dB	-	-	0-15	0-15	0-15	0-15	0-15	0-15	0-15
Interstage attenuator (jumper)	dB	-	-	0/3/7	0/3/7	0/3/7	0/3/7	0/3/7	0/3/7	0/3/7
Interstage equalizer (jumper)	dB	-	-	0/6	0/6	0/6	0/6	0/6	0/6	0/6
Gain return path										
Gain @ 60 MHz	dB	-	-	< - 5.0	< - 5.0	< - 5.0	< - 5.0	22/32	22/32	22/32
Interstage attenuator (jumper)	dB	-	-	-	-	-	-	0/6	0/6	0/6
Interstage equalizer (4 steps/jumper)	dB	-	-	-	-	-	-	0/3/6/9	0/3/6/9	0/3/6/9
Linearity frequency response										
@ 47...1006 MHz	dB	± 1.0	± 1.0	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
@ 85...1006 MHz	dB	± 1.25	± 1.25	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0
@ 5...65 MHz (return)	dB	-	-	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0
Noise figure										
Forward (VHF I „on“)	dB	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0
Return path (RP „active“)	dB	-	-	-	-	-	< 5.5	< 5.5	< 5.5	< 5.5
Return loss @ 40 MHz, -1.5 dB/octave min. Cat C										
Forward	dB	> 18	> 18	> 18	> 18	> 18	> 18	> 18	> 18	> 18
Return path	dB	-	-	> 18	> 18	> 18	> 18	> 18	> 18	> 18
Output level forward										
CSO Cenelec 42 ch. 862 MHz, Slope 0/7 dB	dBµV	100	101	100	101	103	108	100	101	103
CTB Cenelec 42 ch. 862 MHz, Slope 0/7 dB	dBµV	100	101	100	101	103	108	100	101	103
Output level return path										
IMR2 acc EN 50083-3	dBµV	-	-	-	-	-	104	104	104	104
IMR3 acc EN 50083-3	dBµV	-	-	-	-	-	107	107	107	107
Max. output level 16 QAM (KDG1TS140 - C)	dBµV	-	-	-	-	-	120	-	-	-
RF connectors (75 Ohm)										
Ports	pcs	4 x F-con	4 x F-con	4 x F-con	4 x F-con	4 x F-con	4 x F-con	4 x F-con	4 x F-con	4 x F-con
Input		F-female	F-female	F-female	F-female	F-female	F-female	F-female	F-female	F-female
Output		F-female	F-female	F-female	F-female	F-female	F-female	F-female	F-female	F-female
Test point input: bi-directional	dB	-	-	-	-	-	-	-	-	-
Test point output: uni-directional	dB	-	-	-	-	-	-	-	-	-
Operating conditions										
Max. RF level (EMC)	dBµV	-	-	-	-	-	-	-	-	-
Power supply voltage (50-60 Hz)	V	230	230	190-264	190-264	190-264	190-264	190-264	190-264	190-264
Power consumption	W	< 3	< 3	< 9	< 9	< 9	< 9	< 9	< 9	< 9
Operating temperature	°C	-25...+55	-25...+55	-25...+55	-25...+55	-25...+55	-25...+55	-25...+55	-25...+55	-25...+55
Protection class		II	II	II	II	II	II	II	II	II
Housing protection degree	IP	20	20	20	20	20	20	20	20	20
Dimensions W x H x D	mm	170 x 100 x 65	170 x 100 x 65	170 x 100 x 65	170 x 100 x 65	170 x 100 x 65	170 x 100 x 65	170 x 100 x 65	170 x 100 x 65	170 x 100 x 65
Weight	kg	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Packing unit		1 pcs. carton box	1 pcs. carton box	1 pcs. carton box	1 pcs. carton box	1 pcs. carton box	1 pcs. carton box	1 pcs. carton box	1 pcs. carton box	1 pcs. carton box
Reference standards										
Product standards/safety/EMC		EN 50083-3 - Class 2/EN 50083-1; EN 60065/EN 50083-2								
RoHS 2002/95/EG compliant		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes