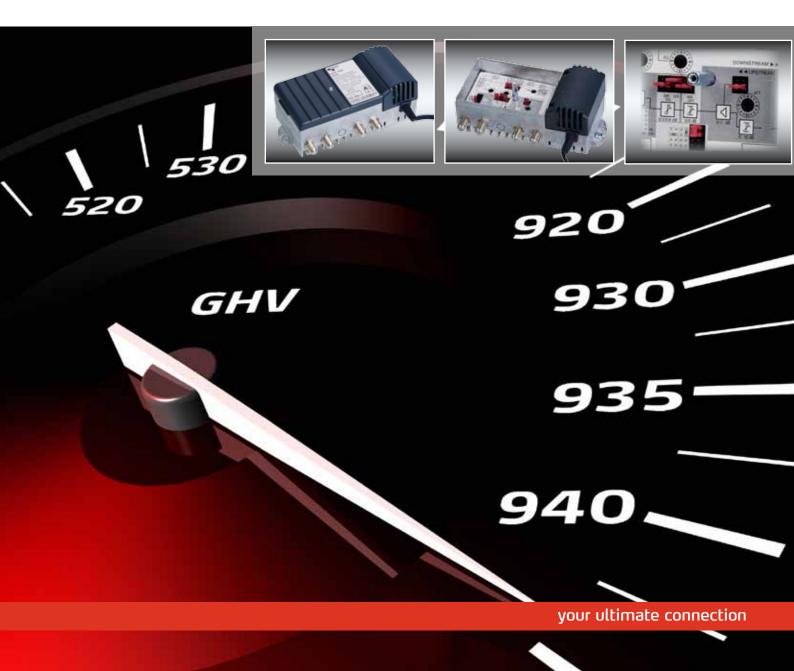


# More Power for Your Distribution Team

The New GHV Amplifier Series



# New team members

### House amplifiers for all applications



#### The perfect choice for everybody! The new house amplifier ranges by TRIAX.

The TRIAX GHV ranges offer great solutions for TV house distribution systems of almost every size. The products boast state-of-the-art technological design, excellent transmission qualities and an exceptionally high adjustablility/variability. The readable adjusters allow the user to set up values calculated during the planning phase when placing the amplifier into operation. This also helps in case the amplifier should need to be serviced as all adjustments previously made can easily be transferred to a replacement. As calibration of the distribution system will thus be quicker and easier you can save valueable time and money.

No matter which amplifier you choose - you will always profit by the excellent product quality and the good technical service TRIAX is known for.

	500 SERIE	900 SERIE
Optimised 1 GHz technology		
16 step rotary switch for attenuation		
16 step rotary switch for equalization		
Interstage equalization 3 dB		
VHF-Band I	•	(switchable)
Selectable return path 5-65 MHz		(active/passive/off)
Reliable all-on-board return path technology		
Measurement port -20 dB for input and output		
Extensive ESD- and surge protection		-
Low power consumption		-



Finding the right amplifier is easy. You can choose from two series with different amplifications and corresponding additional characteristics. The GHV 500 series is designed as a low noise coaxial distribution amplifier for use in small headend-based communal installations (MATV). The GHV 900 series can be used as a house amplifier in cable television distribution networks (CATV) with a multimedia-enabled return path. As the return path can optionally be switched off the amplifiers of the GHV 900 are also perfect for use with VHF band I. In case the network will later be upgraded by adding return path services like internet access the return path can easily be reactivated by replugging the jumpers.

TRIAX G		)				
AMPLIFIER TYPE	SERIE			<b>AIN</b> dB)		YOUR DEVICE
House amplifier	GHV	20	30	35	40	Тур
MATV/SMATV - system	500					TRIAX GHV 520
without return path	500			••••••		TRIAX GHV 530
	900					TRIAX GHV 920
<b>CATV TV - system</b> with return path	900			••••••		TRIAX GHV 930
	900					TRIAX GHV 935
	900			••••••		TRIAX GHV 940

# **GHV 500 Series**

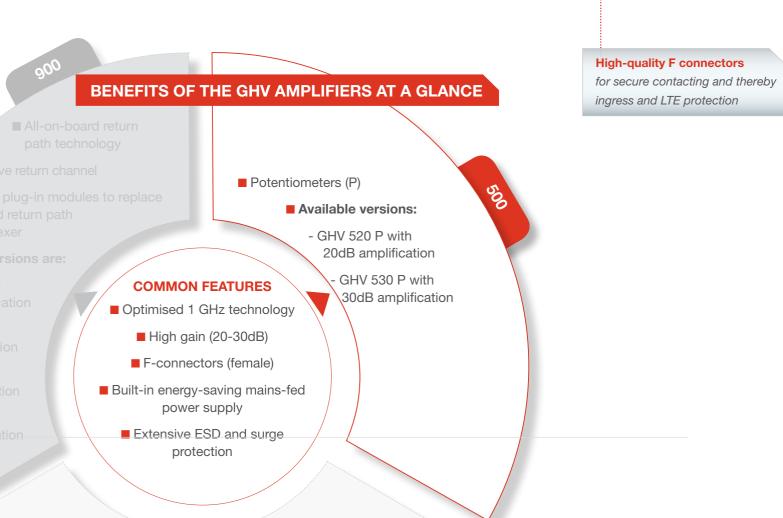


23 mice

Test 0 dB 1

## House amplifier for small buildings

The GHV 500 amplifier series is designed as a low noise coaxial distribution amplifier for use in small headendbased communal installations where no return path is needed. Setting up the amplifier is made easy by the rotary switch and the interstage equalization of 3 dB. Measurement ports at input and output also help to level out the forward path.





#### Rotary switch for attenuation and equalization for reliable, uninterruptible and

reproduceable settings

Highly efficient power supply unit durable and energy-efficient

Excellent amplification parameters

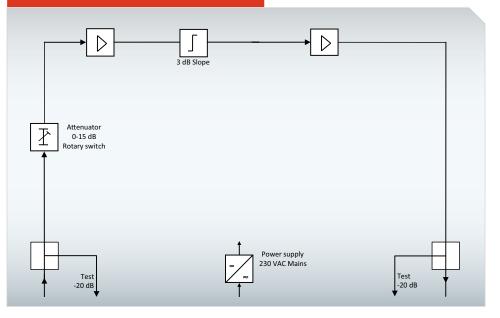
for best picture quality

PWR

Test 20 dB

OUT

### GHV 530 BLOCK DIAGRAM



# **GHV 900 Series**



## High-performance amplifier for small to mid-sized buildings with active/passive return path

The GHV 900 amplifier series features a switchable active/passive return path with 26/32 dB without power loss.

16 step rotary switches and jumpers enable the reliable, uninterruptible and reproduceable setting of attenuation, equalization and cable simulation.

Measurement ports at input and output also help to level out the forward path.



500

- All-on-board active/passive return path technology
- Active return channel

**COMMON FEATURES** 

Optimised 1 GHz technology

High gain (20-30dB)

Functional diecast housing

Built-in energy-saving mains-fed

power supply Extensive ESD and surge protection

- 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

900

GHV 940 with 40dB amplification

#### **High-quality F-connectors**

(not molded into cabinet) including measurement port



## Adjustable attenuation and equalization settings

in 1dB steps using rotary switches and jumpers for readable, easy, and reproducible settings

#### Excellent amplification parameters for best picture quality

Highly efficient power supply unit durable and energy-efficient

High linear MMIC output offers high output levels at low power consumption

### 23/32dB active/passive return path

PW

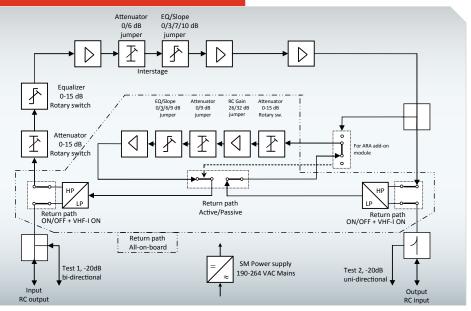
Test 20 dB

DOWNSTREAM ...

and optional automatic return path activation module (ARA) for noise reduction

OUT

#### **GHV 930 BLOCK DIAGRAM**





### Technical Specifications of All GHV Amplifiers

Туре	SMATV/MATV			CATV			
Туре		GHV 520	GHV 530	GHV 920	GHV 930	GHV 935	GHV 940
Art No.		323138	323142	323150	323158	323162	323166
Frequency range							
				47-1006	47-1006	47-1006	47-1006
Forward path/Forward path w. return on	MHz	47-1006	47-1006	85-1006	85-1006	85-1006	85-1006
Return path	MHz	-	-	5-65	5-65	5-65	5-65
Gain forward							
Gain @ 1006 MHz	dB	21	30	20	30	35	40
Gain low/hi jumper	dB	0-15	0-22.5	0-15	0-15	0-15	0-15
Input attenuator - 1dB step (rotary switch)	dB	-	-	0-15	0-15	0-15	0-15
Input equalizer - 1dB step (rotary switch)	dB	-	-	0/6	0/6	0/6	0/6
Interstage attenuator (jumper)	dB	3 fix	3 fix	0/3/7/10	0/3/7/10	0/3/7/10	0/3/7/10
Interstage equalizer (jumper)	dB		•	0/6	0/6	0/6	0/6
Gain return path							
Gain @ 60 MHz	dB	-	-	25	26/32	26/32	26/32
Input attenuation (rotary switch)	dB	-	-	0-15	0-15	0-15	0-15
Interstage attenuator (jumper)	dB	-	-	0/9	0/9	0/9	-
Interstage equalizer (4 steps/jumper)	dB	-	-	0/3/6/9	0/3/6/9	0/3/6/9	0/3/6/9
Linearity frequency response							
@ 471006 MHz	dB	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0
@ 565 MHz (return)	dB	-	-	± 1.0	± 1.0	± 1.0	± 1.0
Noise figure							
Forward (VHF I "on")	dB	5.5	4.5	6.5	6.5	6.5	6.5
Return path (RP "active")	dB	-	-	5.0	5.0	5.0	5.0
Return loss @ 40 MHz, -1.5 dB/octave min. Cat	с						
Forward	dB	> 18	> 18	> 18	> 18	> 18	> 18
Return path	dB	-	-	> 18	> 18	> 18	> 18
Output level forward				•••••		•••••	•••••
CSO Cenelec 42 ch. 862 MHz, Slope 0/7 dB	dBµV	101	102	98/100	101/103	105/107	108/109
CTB Cenelec 42 ch. 862 MHz, Slope 0/7 dB	dBµV	104	105	98/100	101/103	105/107	108/109
Output level return path				•••••			
16 QAM (KDG1TS140 - C)	dBµV	-	-	120	120	120	-
16 QAM (KDG1TS140 - D)	dBµV	-	-	-	-	-	120
RF connectors (75 Ohm)				•••••			
Input/Output		F-female	F-female	F-female	F-female	F-female	F-female
Test point input: bi-directional	dB	-20	-20	-20	-20	-20	-20
Fest point output: uni-directional	dB	-20	-20	-20	-20	-20	-20
Operating conditions							
Power supply voltage (50-60 Hz)	V	190-264	190-264	190-264	190-264	190-264	190-264
Power consumption	W	< 3	< 3	< 5	< 7	< 9	< 11
Operating temperature	°C				+55		
Protection class	КV			4	/1		
Housing protection degree				• • • • • • • • • • • • • • • • • •	 I		
Dimensions W x H x D					20		
Weight	mm	•					
-		170 x 90 x 65					
Packing unit	kg			•••••			
/erpackungseinheit				1 pcs. ca	arton box	•••••	•••••
Reference standards							••••••
Product standards/safety/EMC		EN 60728-3 Class 2 / EN 607728-11, EN 60065 / EN 50083-2 Yes					
RoHS 2002/95/EG compliant				Υ			

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