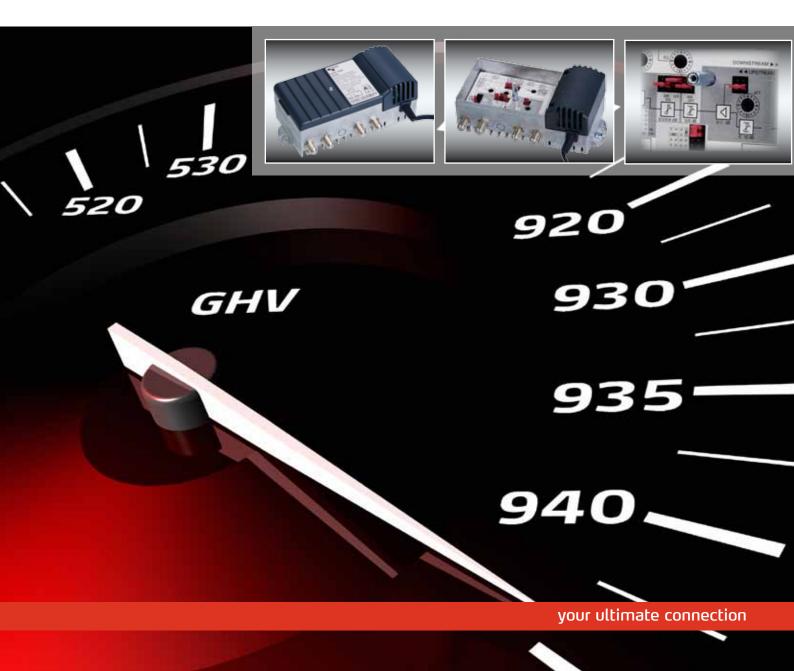


More Power for Your Distribution Team

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 | | | AIN 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 |
| CATV TV - system with return path | 900 | | | •••••• | | TRIAX GHV 930 |
| | 900 | | | | | TRIAX GHV 935 |
| | 900 | | | •••••• | | TRIAX GHV 940 |

GHV 500 Series

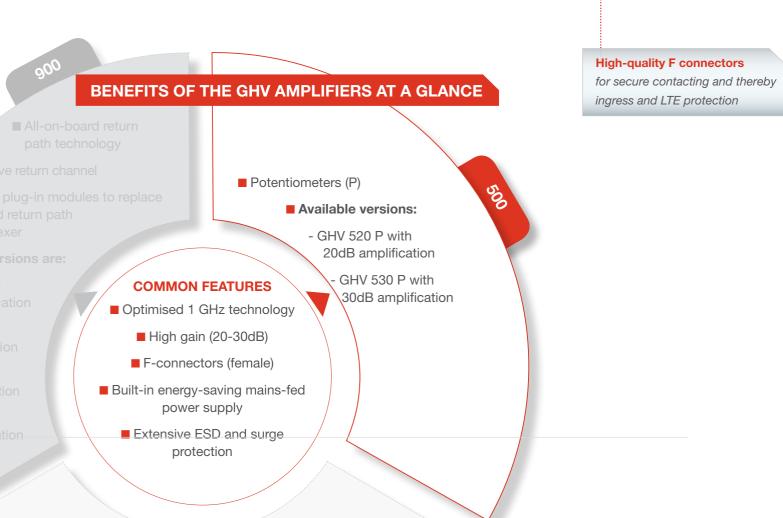


23 mice

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

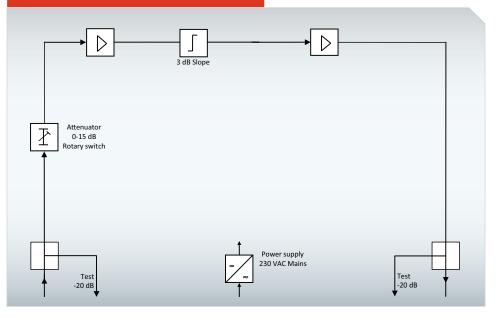
for best picture quality

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

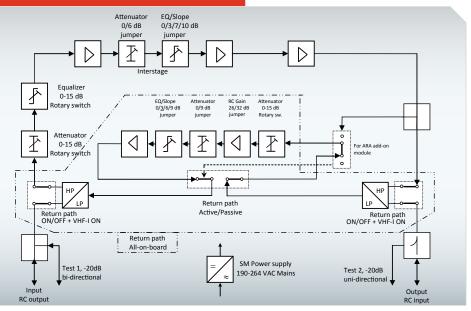
Test 20 dB

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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