

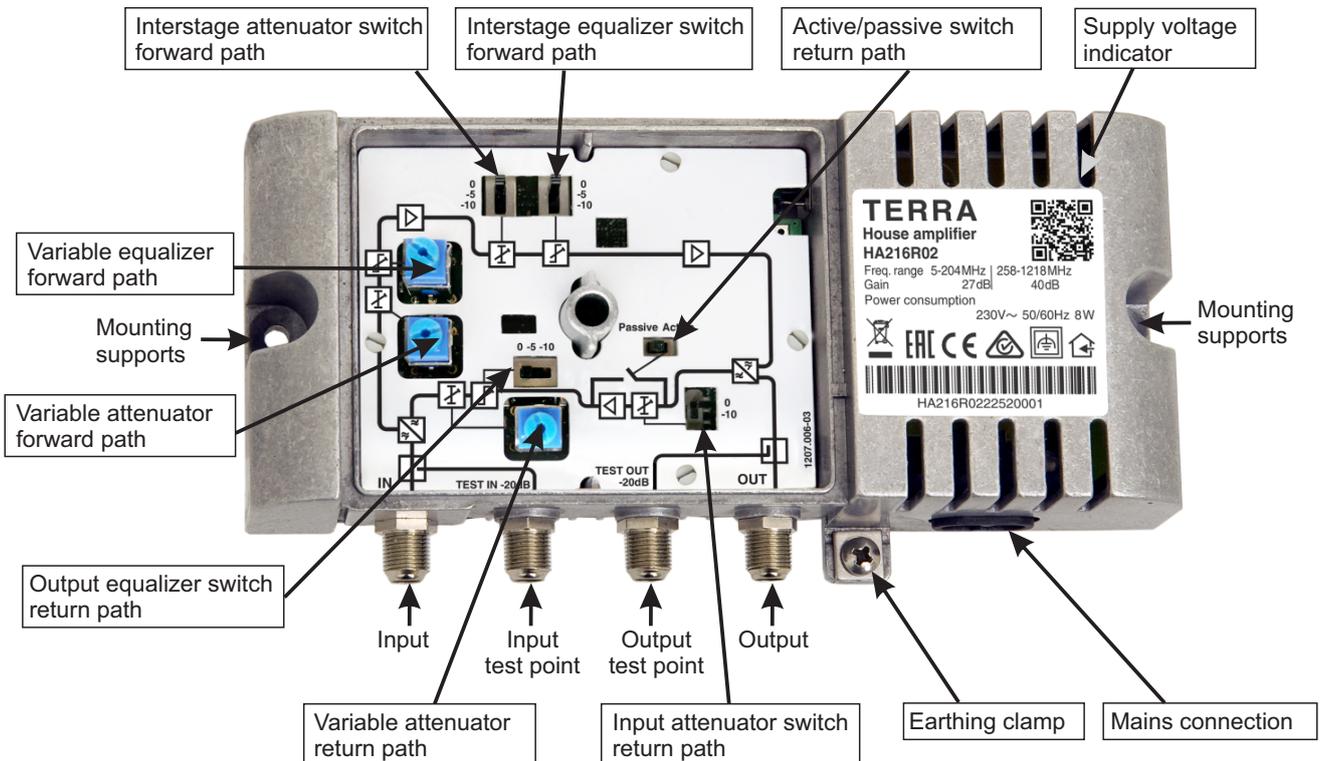
Product description

House amplifier (in text - amplifier) is intended for amplifying and distributing TV signals in cable TV networks. The amplifier is powered from the mains 230 V~. This amplifier is intended for indoor use only.

Safety instructions

Installation of the amplifier must be done according IEC60728-11 and national safety standards. Any repairs must be done by a skilled personnel. The amplifier is powered from the mains 230 V~. This voltage is dangerous to life. The amplifier is double isolated from the mains 230 V~. To ensure safe operation of the amplifier follow these instructions: Do not remove the cover of the power supply section, without disconnecting the unit from the mains supply. Do not plug the amplifier into the mains supply if the power cord or plug are damaged. Do not plug the amplifier into the mains supply until all cables have been connected correctly. The mains socket must be easily accessible. Avoid placing the amplifier next to central heating components and in areas of high humidity. If the amplifier has been kept in cold conditions for a long time, keep it in a warm room no less than 2 hours before plugging into the mains. Do not insert any objects into ventilation openings. The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains. Mount the amplifier in vertical position with RF connections underneath. The amplifier must be fixed with steel screws Ø 4-4.5 mm. The screws are not included in a package. From top, front and bottom of installed amplifier must be at least 10 cm free space.

External view and operating controls



Manual in .pdf



Test points

Input test point is bi-directional. It is used for return path signal measurement during return path adjustment as well as for forward path input signal monitoring during network troubleshooting.

Output test point is directional. It is used for forward path output signal measurement during forward path adjustment as well as for return path input signal injection during return path adjustment. In all cases test point gives 20 dB attenuation.

Technical characteristics

Type	HA216R02
Forward path	
Frequency range	258-1218 MHz
Gain	40 dB
Input attenuator adjustment	0...18 dB
Input equalizer adjustment	0...15 dB
Interstage attenuator	-10/-5/0 dB
Interstage equalizer	-10/-5/0 dB
Flatness*	±1 dB
Output level CTB, CSO (EN60728-3)**	107/108 dB μ V (34 channels)
Output level U _{max} , typical**	104 dB μ V (120 QAM channels)
Noise figure	6 dB
Return path	
Frequency range	5-204 MHz
Gain, switchable (active / passive)	27/-5 dB
Input attenuator (for active path)	-10/0 dB
Output attenuator adjustment	0...18 dB
Output equalizer	-10/-5/0 dB
Flatness	±1.5 dB
Noise figure	7 dB (active, 0 dB input attenuator)
Output level IMD3=60 dB (EN60728-3) at 0 dB output attenuator and equalizer***	115 dB μ V (active), 121 dB μ V (passive)
General	
Input and output return loss	≥ 14 dB at 40 MHz; -1.5 dB/oct., but not less 10 dB
Input test point at ≤ 790 MHz	-20 dB ± 2.5 dB
Output test point	-20 dB ± 0.5 dB
Supply voltage limit values, power consumption	198-250 V~ 50/60 Hz 8 W
Operating temperature range	-20° C ÷ +50° C
Dimensions/Weight (packed)	185x91x47 mm/0.7 kg

* measured 10 MHz after the starting frequency of forward path

** with 0/5 dB interstage equalizer

*** 130 & 132 MHz carriers



Risk of electric shock.



This product complies with the relevant clauses of the European Directive 2002/96/EC. The unit must be recycled or discarded according to applicable local and national regulations.



Equipment intended for indoor usage only.



Equipment is double insulated from the mains, with functional earthing.



Functional earthing. Connect to the main potential equalization.



This product is in accordance to following norms of EU: EMC norm EN50083-2, safety norm EN IEC62368-1, RoHS norm EN50581.



This product is in accordance with Custom Union Technical Regulations: "Electromagnetic compatibility of technical equipment" CU TR 020/2011, "On safety of low-voltage equipment" CU TR 004/2011.



This product is in accordance with safety standard AS/NZS 60065 and EMC standards of Australia.