

UHF low noise amplifier

Wideband antenna gain block ZA-20 is designed especially for amplification of weak TV-signals. ZA-20 provides for excellent receiving of PAL and DVB-T signals.

Key features:

- Noise figure < 1.3dB
- High gain 20dB
- Wideband
- Low power consumption
- Inexpensive and reliable
- Compact
- Remote powering option
- Indicator-LED



Application areas:

- Digital tuner systems
- Private house antenna systems
- CATV/MATV

General description:

Amplifier ZA-20 is intended for reliable receiving of PAL and DVB-T channels in regions where signal strength is quite small. The amplifier guarantees for the low level of its own contributed noise.

ZA-20 can be powered through output connector only. In this case some type of current injector must be used for example like Rantelon BT-1. Indicator-LED is active while power is switched on. Built-in DC overvoltage protection helps to avoid damages from the wrong device voltage.

Technical specifications:

Parameter	Specification
Frequency	470-862MHz
Gain (S21)	20dB
Noise figure	<1.3dB
Output level DIN45004B	109dB μ V
Input/Output return loss (-S11/-S22)	>10dB (average)
Isolation (-S12)	>27dB
Power consumption	+4.5...+5.5V/60mA
Built-in DC overvoltage protection	+6.8V
Impedance	75 Ω
Connector type	F-female
Operating temperature	-40...+85°C
Dimensions	35x47x30mm



Example of ZA-20 input return loss (-S11) and transmission (S21) curves.

Installing ZA-20 in outdoor conditions protective enclosure must be used. Such type plastic enclosures are reliable, inexpensive and most commonly used in MATV/CATV world. Some examples are shown on the picture below.



Plastic protective enclosures for outdoor conditions.