

Tunable mast-mounted amplifier

WK-410



- Designed for antenna systems used to receive the DVB-T digital terrestrial television signals
- Two UHF inputs, one VHF and one UKF (FM) inputs
- SAW filter on the UHF1 input to eliminate the disturbance from mobile internet (LTE)
- The gain in each of the four bands is controlled by means of potentiometers
- Can be installed outdoors, on the antenna mast (thanks to splash-proof housing)

The **WK-410 tunable mast-mounted amplifier** has been designed for antenna systems used to receive the DVB-T digital terrestrial television signals. It can be used with both passive and active antennas with built-in preamp (DC circuit in one UHF band).

The amplifier has an external power supply. The voltage is supplied via a branching filter and coaxial cable connected to the output.

The **WK-410 amplifier** features two UHF inputs, one VHF input and one UKF input (FM), and built-in channel filters. The filters can be assigned to each UHF input by means of jumpers (available options include 4/0, 3/1, 2/2 – see metal cover for detailed arrangement of jumpers of each option). In addition, the amplifier connects all inputs in a manner of an antenna branching filter, so it is ready to sum the signals from various antennas, including the MUX reception in the VHF band. The WK-410 has also a SAW filter on the UHF1 input to eliminate the disturbance from mobile internet (LTE).

The basis task of the amplifier is to select four signals with different levels received in the UHF band in order to equalize them. The signals prepared in this manner can be connected directly to a TV receiver of a DVB-T tuner. In case of a more extensive cable system, signals from the WK-410 can be amplified by a WSS or WMX external amplifier and sent via the cable system to receivers.

The gain in each of the four bands is controlled by means of potentiometers located in the openings of the metal cover.

In a plastic splash-proof housing the WK-410 can be installed outdoors, on the antenna mast.

TECHNICAL PARAMETERS

| TYPE | | WK-410 |
|---|------|------------------------------------|
| Frequency range | | |
| - UKF | MHz | 87,5 – 108 |
| - VHF | MHz | 174 – 230 |
| - UHF1 | MHz | 470 – 790 Limited by SAW filter |
| - UHF2 | MHz | 470 – 790 |
| Filter tuning range – channels | / | k.21-k.60 |
| No. of UHF channel filters | / | 4 |
| Assignment of channels for UHF inputs | / | jumper |
| Gain in pass band | | |
| - FM gain | dB | -2 ±1 |
| - VHF gain | dB | -2 ±1 |
| - UHF pass band | dB | 18 ±3 |
| Gain adjustment | dB | -20 ±3 |
| Output level (DIN 45004B) IM3=60dBc | dBμV | 100 |
| OTHER | | |
| Power supply of amplifier | V/mA | +12 / 200 |
| Power supply of pre-amplifier in UHF band | V/mA | +12 / 50 |
| Output/input impedance | Ohm | 75 / 75 |
| Dimensions (without plastic housing) | mm | 80 x 70 x 35 |
| Operating temperature | °C | -20 ÷ +55 |
| Type of input/output connectors | / | "F" socket / "F" socket |

Technical parameters may be changed without earlier notice.