



### VOS 138/RA 2.0

House connection amplifier 47/85-1006 MHz | remotely powered via RF input (self-supply)

Order no:209500004



House connection amplifier | 47/85-1006 MHz | F-connector | gain 40/34/30 dB | level control/equalizer: 20 dB | 113/116 dB $\mu$ V (60dB CTB/CSO, Cenelec 42 Ch.)

- House connection amplifier for modern HFC networks
- Remote powered via RF input (self-powered)
- Latest GaAs MMIC technology
- Very high output level with favorable energy balance
- High efficiency switching power supply
- New innovative operating concept:
  - Simplified level adjustment via rotary switch, large adjustment range (20 dB), small step size (1 dB)
  - Basic configuration via jumpers
  - Precisely reproducible device settings
- Slot for additional functions in the forward path (e.g. deemphasis, system equalizer)
- Gain by interstage attenuation switchable with jumper 40/34/30 dB (delivery condition: 34 dB)
- Diplexer can be bridged (Band I operation possible without return path)
- Return path (active/passive/disconnectable) with various setting options permanently integrated
- Classification according to KDG 1 TS 140: Type D(4.4)
- Test sockets (F-connectors):
  - Bidirectional at the input (can be switched on)
  - With directional coupler at the output
- Internal LED function indicator
- Overvoltage arrester at input and output

Status 10/2024

- Complies: EN 60728-11, EN 50083-2 and EN 62368-1
- Cast housing with F connections
- For use in locations protected from the weather
- The amplifier complies with the requirements of the EMC Directive 2014/30/EU and the Low Voltage Directive 2014/35/EU valid at the time of delivery

Technical data:

Type:	VOS 138/RA 2.0
Bestell-Nr.:	209500004
Vodafone-/KDG-Freigabe:	ja
Vorwärtsweg:	-----
Frequency range <sup>1)</sup> :	47/85-1006 MHz
Gain:	40/34/30 dB
Attenuator setting range:	0-20 dB
Equalizer setting range :	0-20 dB
Interstage attenuation setting range:	0-20 dB
Interstage equalization adjustment range:	0/3/6 dB, 0/6 dB
Maximum operating level at 862 MHz <sup>2)</sup> with 6 dB interstage preemphasis (60 dB CTB/CSO):	113/116 dB $\mu$ V
Noise figure (interstage attenuation 0/6/10 dB):	Type. 6/7/7 dB
Rückweg:	-----
Frequency range:	5-65 MHz
Gain active/passive:	30 dB/-2 dB
Input attenuation setting range:	0/10 dB
Input equalization setting range:	0/3 dB
Interstage attenuation adjustment range:	0-20 dB
Interstage equalization adjustment range:	0/3/6 dB
Max. Output level (60-dB-IMA2/IMA3)	107/116 dB
Output capability KDG 1 TS 140 (full system load):	120 dB $\mu$ V
Noise Measure:	Type. 5 dB
Input level density (CINR at 50 dB, EN 60728-3; 4.7):	-10 dB $\mu$ V/Hz
Dynamic range (EN 60728-3; 4.7):	17 dB
Test sockets (F-Connector)	-----
Amplifier input (5-1006 MHz, bidirectional):	-20 dB
Amplifier output (5-1006 MHz, with directional coupler):	-20 dB
Schaltnetzteil:	-----
Nominal input voltage:	32-65 V~ (50/60 Hz)
Typical nominal input power <sup>3)</sup>	
Return path passive or deactivated:	14 W
Return path active:	15 W
Allgemeines:	-----
Impedance input/output:	<b>75 <math>\Omega</math></b>
HF-Anschlüsse:	F-Connector
Protection class (to EN 60529) <sup>4)</sup> :	IP 54
Temperature range:	-20 to +55 °C

Status 10/2024

Dimensions:	218 x 150 x 80 mm
Packaging unit/weight:	1 (10)/1.25 pcs/kg
Classification according to KDG 1 TS 140:	Type D (4.4)

<sup>1)</sup> Frequency range from 47 MHz without return path use

<sup>2)</sup> According to EN 60728-3; CENELEC grid with 42 beams

<sup>3)</sup> VOS 138/RA 2.0 and VOS 139/RA 2.0: Nominal input power as a function of the feed-in voltage during operation via the cable resistor

<sup>4)</sup> Outdoor use in weather-protected cabinets only.

### Downloads

- [VOS 138/RA - Product data sheet \(Version: 08/2023 - Größe: 136.07 KB\)](#)
- [VOS 138/RA - Produktdatenblatt \(Version: 10/2024 - Größe: 130.92 KB\)](#)
- [VOS 137/RA 2.0-VOS 138/RA 2.0-VOS 139/RA 2.0 - Bedienungsanleitung | User Manual \(Version: 2 - Größe: 1.55 MB\)](#)



### Produkt Galerie / Product Gallery:

