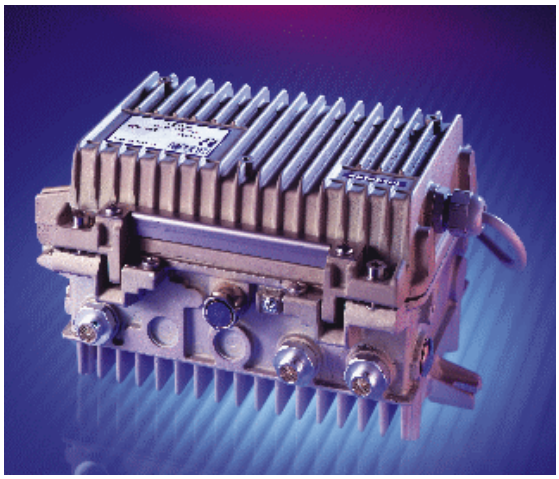
Compact amplifier

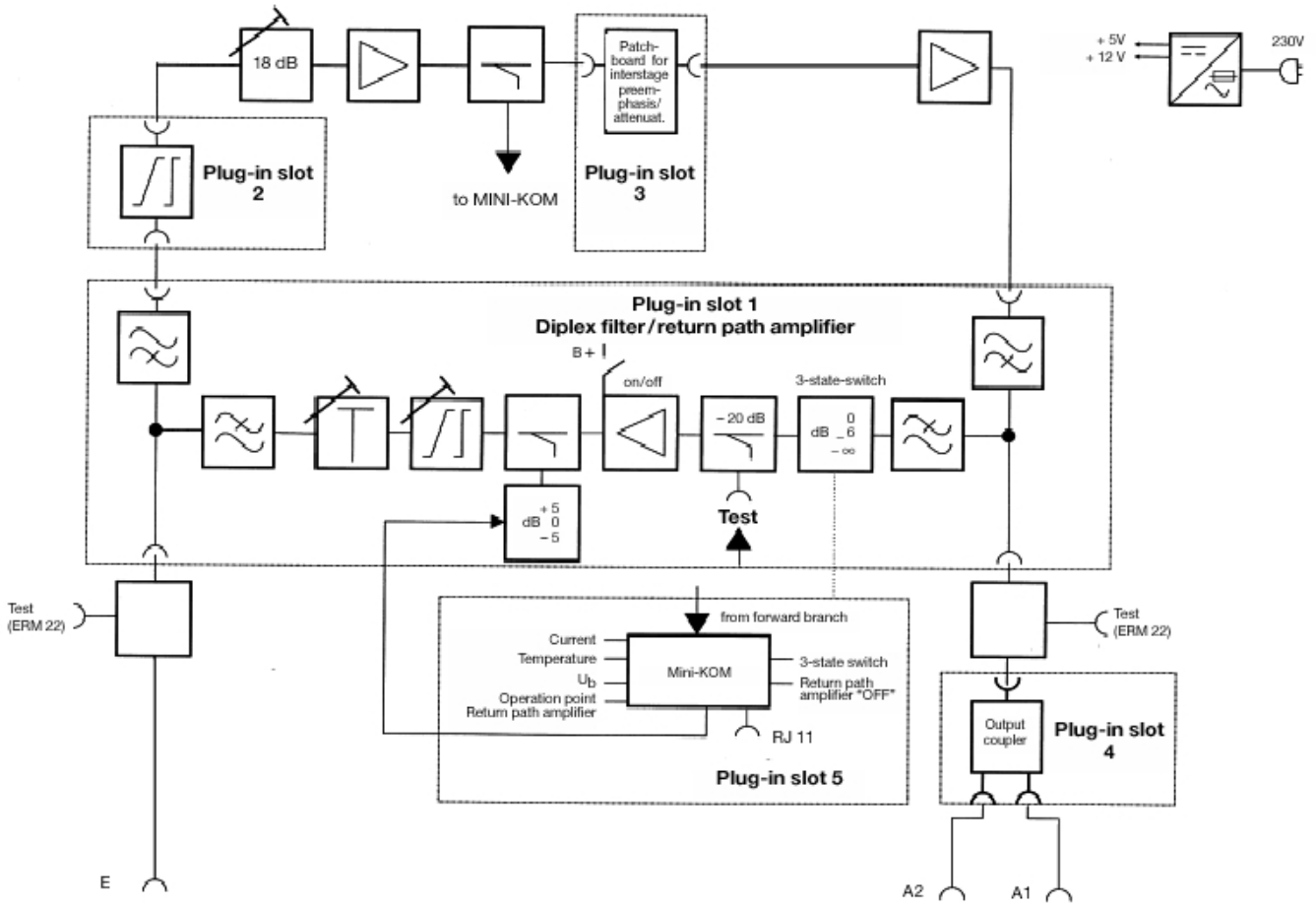
Distribution network amplifiers VGF/VGO 81



- VHF/UHF distribution network amplifier for HFC cable systems.
- GaAs technology utilised, delivering:
  -Highest possible interference ratios
  -Very high output levels
- High reliability due to effective heat dissipation.
- Plug-in module for HFC network monitoring using KOM.
- Plug-in module for active return path with filters for up to 30 or 65 MHz.
- Single input.
- Single or two outputs, settable.
- Housing: RF-tight cast aluminium, protection class IP 54, optional IP 67 (with ventilation set ZVB 81).
- RF-connectors: PG 11 connectors, see accessories.
- "VGF"-version remotely fed, „VGO“-version mains supplied.
- Overhead cable or pole mounting is possible when using the cable mounting set ZVS 81.

				Remotely fed	Mains fed
Type				**VGF 81**	**VGO 81**
Order no.				232215	232200
Forward path					
	Frequency range		MHz	47 - 862 / 80 - 862 / 85 – 862	
	Nominal gain		dB	34	
	Impedance		Ω	75	
	Return loss	At 40 MHz	dB	≥18 - 1,5/Okt.	
	Adjustment range of amplification		dB	0 – 18	
	Adjustment range of equalisation		dB	0 - 15 (separate plug-in module)	
	Output level [1]				
		at 60 dB CSOA	dBµV	110	
		at 60 dB CTBA	dBµV	109	
	Noise figure typ. [2]		dB	8	
Return path [3]					
	Frequency range		MHz	5 - 30 / 5 - 60 / 5 - 65	
	Nominal gain		dB	23	
	Return loss		dB	≥20	
	Impedance		Ω	75	
General					
	Disturbing radiation	acc. to EN50083-2	dBpW	<20	
	Remote feed voltage		V~	18 - 65	230
	Power consumption		W	13 - 16	
	Remote feed current max.		A	6	-
	Dimensions	B x H x T	mm	218 x 172 x 142	
	Weight		kg	3	

[1] According to CENELEC channel plan 42 channels, without pre-emphasis.
[2] 25°C, 1 output.
[3] With return path module VGR 30/34/31.


18 dB
Patch-board for interstage preem-phasis/ attenuat.
+ 5V
+ 12 V
230V
Plug-in slot 2
to MINI-KOM
Plug-in slot 3
Plug-in slot 1
Diplex filter/return path amplifier
B + I
on/off
3-state-switch
– 20 dB
0
dB – 6
– ∞
+ 5
dB 0
– 5
Test
Test (ERM 22)
from forward branch
Current
Temperature
U_b
Operation point Return path amplifier
Mini-KOM
3-state switch
Return path amplifier "OFF"
RJ 11
Plug-in slot 5
Test (ERM 22)
Output coupler
Plug-in slot 4
E
A2
A1

Basic units, plug-in modules and components

Basic unit

Amplifier basic unit with power supply unit, 34 dB amplification in the forward path, without zero cards.

Return/forward path filters (The plug-in card is required for operation).

The plug-in position **1** can be occupied as follows:

		Order no.
VGR 00	Zero card, amplifier can only be operated In the forward path.	232144
VGR 30	Return path module, 25 dB, 5-30/47-862 MHz Pushpull, supports KOM/SIMS	232194
VGR 34	Return path module, 25 dB, 5-60/80-862 MHz Pushpull, supports KOM/SIMS	232211
VGR 31	Return path module, 25 dB, 5-65/85-862 MHz Pushpull, supports KOM/SIMS	232195

Equalisers (The plug-in card is required for operation).

The plug-in positions **2** and **3** can be occupied as follows:

EXR 20	Variable equaliser	0-15 dB, up to 447 MHz	273678
EXR 21	Variable equaliser	0-15 dB, up to 606 MHz	273679
EXR 22	Variable equaliser	0-15 dB, up to 862 MHz	273680
EXR 23	Variable equaliser	7-16 dB, up to 862 MHz	273686
EXR 24	Variable equaliser	15-24 dB, up to 862 MHz	273687
EXR 25	Fixed equaliser	7,0 dB, up to 862 MHz	
	with fixed attenuation	10 dB, up to 862 MHz	273723
ERT 30	Equaliser zero card	0 dB, up to 862 MHz	273630
ERT 34 C	Fixed equaliser	4 dB, up to 862 MHz	24510021
ERT 31	Fixed equaliser	7 dB, up to 862 MHz	273631
ERT 31 S	Fixed equaliser	9 dB, up to 862 MHz	273671
ERT 32	Fixed equaliser	11 dB, up to 862 MHz	273632
ERT 34 A	Fixed equaliser	14 dB, up to 862 MHz	273706
ERT 33	Fixed equaliser	17 dB, up to 862 MHz	273633
ERT 34 B	Fixed equaliser	21 dB, up to 862 MHz	273707
ERT 35	Fixed equaliser	7,0 dB, up to 862 MHz	
	with fixed attenuation	10 dB, up to 862 MHz	273635

Output tap-offs/splitter (The plug-in card is required for operation).

The plug-in position **4** can be occupied as follows:

			Order no.
EAC 60	Tap-off	10/1,7 dB (1 x trunk, 1 x bridge)	272018
EAC 63	Tap-off	6/2 dB (1 x trunk, 1 x bridge)	272673
EAC 64	Tap-off	14/0,5 dB (1 x trunk, 1 x bridge)	272674
EBC 60	2-way splitter	(2 identical outputs)	272611
ERT 99	Zero card	(only 1 output)	273681

Monitoring module as option

The plug-in position **5** can be occupied as follows:

TVM 801/V	Monitoring module KOM	26210005
TVM 840/V	Monitoring module HMS, 5-8 MHz	26210033
TVM 840/V	Monitoring module HMS, 8-13 MHz	26210032
TVM 840/V	Monitoring module HMS, 13-19 MHz	26210037