

Kompaktverstärker

VGP 8038 – Geregelter Kompaktverstärker

The VGP 8038, presenting universal pilot control and electronic positioning elements instead of attenuation regulating units or attenuation plug-in cards, offers two innovations at the same time without gaining on size. Its extremely compact outside dimensions remain unchanged. The universal pilot control is attained through a broad pilot frequency tuning range as well as through the possibility to easily tune the pilot frequency on site.

PAL, NTSC or QAM signals as well as a CW (Sinus) carrier can be alternatively used as pilot signals. The variety of pilot regulating modules which up to now were often necessary are no longer needed, which means substantially lower logistic costs for the operating authority. The VGP 8038 also has a slot for monitoring transponders (KOM or HMS) as well as a slot for return path amplifiers with Diplex filters (30, 60 or 65 MHz). Moreover, it presents electronic positioning elements for input attenuation, interstage electronic attenuation and interstage equalization. Mounting on a cable or mast is possible with appropriate equipment. All Kathrein distribution network amplifiers can be monitored either through the TVM 840 compact HMS transponder, the Kathrein KOM System (Kathrein Operating Maintenance System) or with other monitoring systems in compliance with the HMS standard.



Type		VGP 8038 Remote-fed
Order no.		24410021
Forward path		
Frequency range	MHz	47-862/80-862/85-862
Nominal gain	dB	38
Impedance	Ω	75
Return loss at 40 MHz	dB	$\geq 18-1,5/\text{Oct.}$
Attenuation control range Input	dB	0-10
Attenuation control range Interstage	dB	0-5
Equalization control range on input	dB	0-4
Typ. Output level ¹⁾ for signal-to-noise 60 dB		
CENELEC. flat, CSO ⁴⁾ /CTB	dB μ V	120/115
10 dB slope CSO ⁴⁾ /CTB	dB μ V	116/113
Typ. noise figure ²⁾	dB	6,5
Pilot control		
Pilot frequency range	MHz	420-670
Adjustment range at 862 MHz	dB	± 3
Return path³⁾		
Frequency range	MHz	5-30/5-60/5-65
General		
Radio interference in compliance with EN 50083-2	dBpW	< 20
Supply voltage	V~	28-90
Power consumption	W	20-23
Max. remote feed current	A	6
Dimensions (W x H x D)	mm	218 x 172 x 142
Weight	kg	3,0

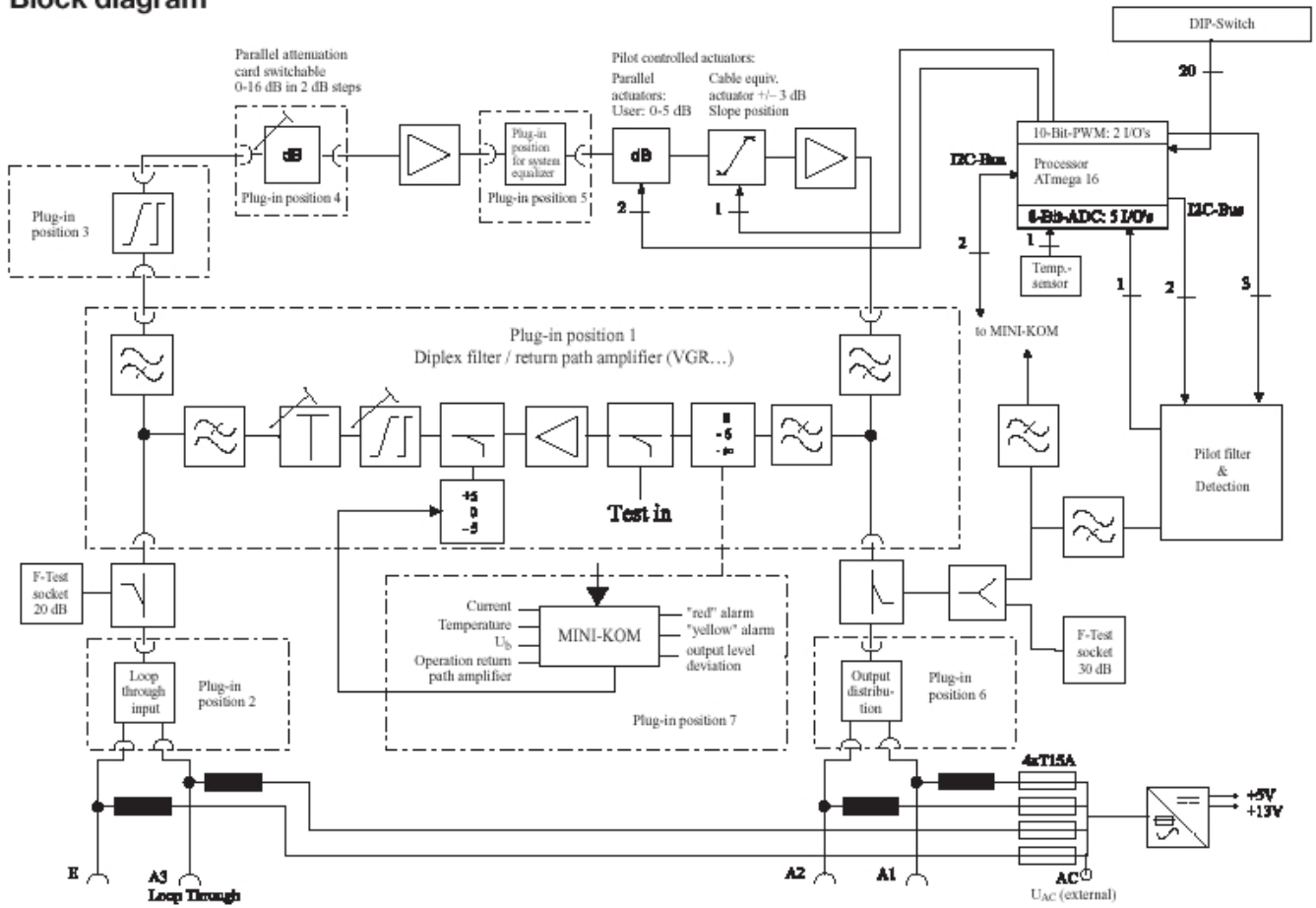
¹⁾ Measurement conditions: CENELEC channel pattern, 42 channels, output level: 110 dB μ V, calculated values

²⁾ Equalization and attenuation = 0 dB, zero card on bridging-type input. 450/606/862 MHz, typical values

³⁾ With return path module VGR 30, VGR 34 or VGR 31

⁴⁾ With use of channel 2 (47-54 MHz) 3 dB or less

Block diagram



Basic units, plug-in modules and components

Basic unit

Amplifier basic unit with power supply unit, 38 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

Loop-through input (The plug-in card is required for operation).

The plug-in position **2** can be occupied as follows:

			Order no.
EAC 60	Tap-off	Loop-through E → A3: 1,7 dB 10 dB tap loss in the amplifiers	272018
EAC 63	Tap-off	Loop-through E → A3: 2,0 dB 6 dB tap loss in the amplifiers	272673
EAC 64	Tap-off	Loop-through E → A3: 0,5 dB 14 dB tap loss in the amplifiers	272674
EBC 60	Splitter	Loop-through E → A3: 4,0 dB 4 dB tap loss in the amplifiers	272611
ERT 99	Zero card	Without loop-through input	273681

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

The plug-in positions **3** and **4** can be occupied as follows:

ERX 20	Variable equaliser	0-15 dB, up to 447 MHz	273678
ERX 21	Variable equaliser	0-15 dB, up to 606 MHz	273679
ERX 22	Variable equaliser	0-15 dB, up to 862 MHz	273680
ERX 23	Variable equaliser	7-16 dB, up to 862 MHz	273686
ERX 24	Variable equaliser	15-24 dB, up to 862MHz	273687
ERX 25	Fixed equaliser with fixed attenuation	7,0 dB, up to 862MHz 0-10 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, with fixed attenuation	7,0 dB, up to 862MHz 10 dB, up to 862 MHz	273635

Attenuation cartridge (Plug-in module necessary for operation, included in delivery):

Allocation of slot **4**:

ERD 816	attenuation cartridge, commutable	0-16 dB in 2-dB steps	24510049
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Attenuators/equalisers (The plug-in card is required for operation).

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

ERT 27 A	Fixed equaliser	2 dB, up to 862 MHz	273688
ERT 27	Fixed equaliser	3 dB, up to 862 MHz	273627
ERT 27 B	Fixed equaliser	4 dB, up to 862 MHz	273689
ERT 28	Fixed equaliser	6 dB, up to 862 MHz	273628
ERT 29	Fixed equaliser	9 dB, up to 862 MHz	273629
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 with fixed attenuation	7 dB, up to 862 MHz 10 dB, up to 862 MHz	273635

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

The plug-in position **6** can be occupied as follows:

EAC 60	Tap-off	10/1,7 dB (1 x trunk, 1 x bridge)	Order no. 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 **7** 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

External remote power feeding

GMZ 90 Remote feeding filter attachment for remote control VGF 80xx, VGP 8038 279150
 Panel jacks PG 11, panel jacks 5/8", panel jacks 90°,
 Couplers and adapters on request.