

PAS .../GN/Kfz series of 2-/4-Quadrant Amplifiers

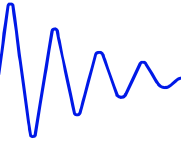


PAS 2500/GN7Kfz



PAS 5000/GN/Kfz

The 2-/4-Quadrant Amplifier type PAS GN/Kfz suits as an adjustable voltage source for automotive supply simulation for 12V, 24V and new 42V especially for the generation of pulse #2b and pulse #4 for all mentioned supply voltages.



2-Quadrant-Amplifier type PAS 1000/GN/Kfz

Technical data

Output:

Continuous power:

870W at 58V

Short-time power:

1450W for max. 3min. at 58V (duty cycle 1:9)

Nominal voltage:

$U_1: 0-17V_{DC} / I_{cont}: 28A_{DC} / I_{short-time}: 44A_{DC}$
 $U_2: 0-34V_{DC} / I_{cont}: 22A_{DC} / I_{short-time}: 44A_{DC}$
 $U_3: 0-58V_{DC} / I_{cont}: 15A_{DC} / I_{short-time}: 25A_{DC}$
(see power characteristic)

Voltage adjustment:

depending on oscillator used

Load regulation:

0 – nominal load: < 2%

Gain stability:

- 10min: < 0.2% at constant load and temperature
- 8h: < 0.5% at constant load and temperature

Line regulation:

< 1.5×10^{-4} per 10V line-voltage change

Frequency range:

DC – 50kHz small signal bandwidth

Rise time:

$U_1: > 1V/\mu s$
 $U_2: > 2V/\mu s$
 $U_3: > 3V/\mu s$

Protection circuits:

- Over load
- Short circuit
- Over temperature

Input:

Input voltage:
for max. output voltage

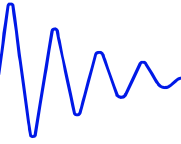
$\pm 5V_p$

Input impedance:

approx. 8k Ω

Power supply:

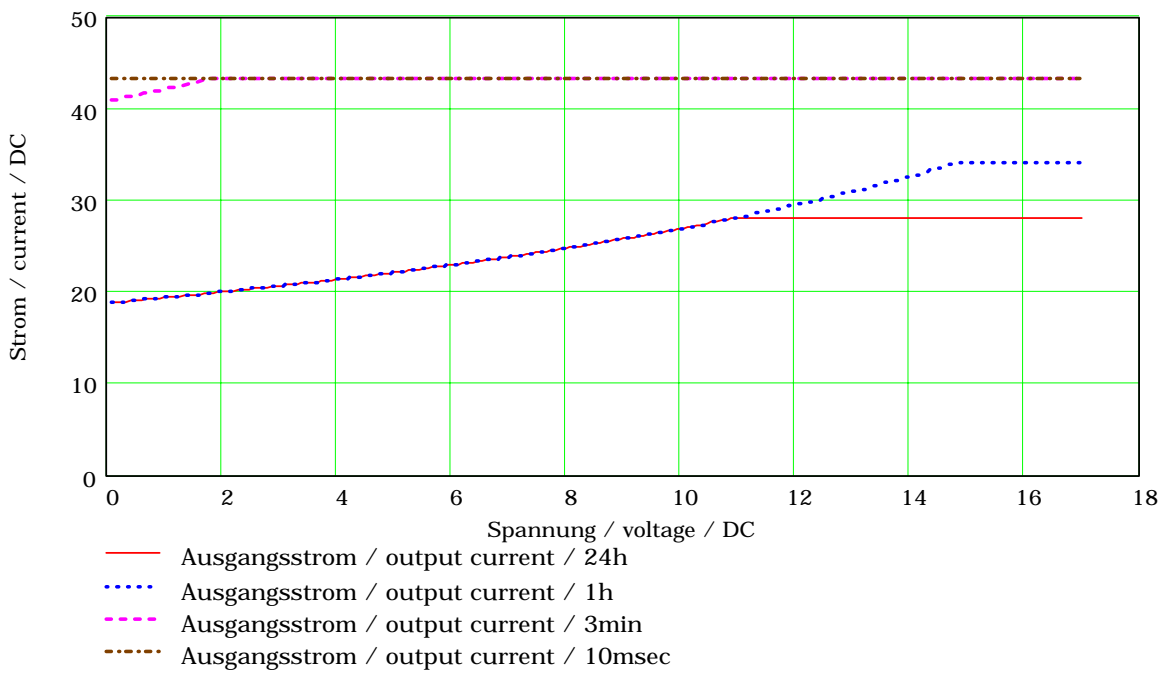
230V/400V (+6%/-10%) 50Hz-60Hz (Protection 16A)



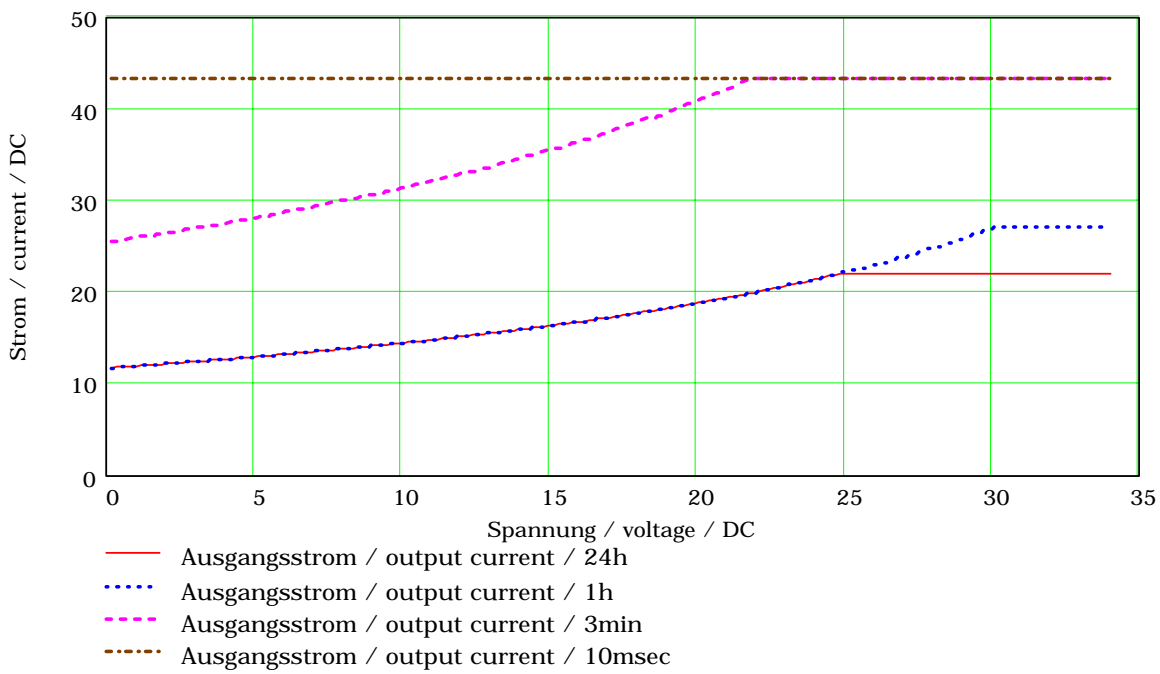
<u>Ambient temperature:</u>	0°C up to +40°C
<u>Housing:</u>	
(without option pulse 5): Plug-in unit (4U):	H=178mm; W=483mm; D=600mm
(with option pulse 5): Amplifier: Plug-in unit (6U): Power supply: Plug-in unit (8U):	H=266mm; W=483mm; D=600mm H=355mm; W=483mm; D=600mm
<u>Weight:</u>	approx. 60kg (without option pulse 5) approx. 120kg (with option pulse 5)
<u>Options:</u>	
Option 06:	output voltage monitor
Option 07:	output current monitor
Option 10:	internal resistance compensation
Option 11:	special voltage ranges
Option 17-300:	floating output Max. Voltage between earth and ground of the output of the amplifier: $300V_{rms}$
Option 18:	special line voltages in the range from 110V – 300V
Option pulse 5:	$U_{test\ pulse\ 5\ (short-time)}$: max. 200V _{DC} / R_i : 0.5Ω-8Ω
Option pulse 7:	$U_{test\ pulse\ 7\ (short-time)}$: max. -80V _{DC} / R_i : 10Ω

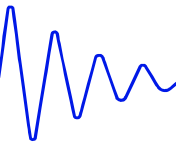


Current / voltage range: 17V

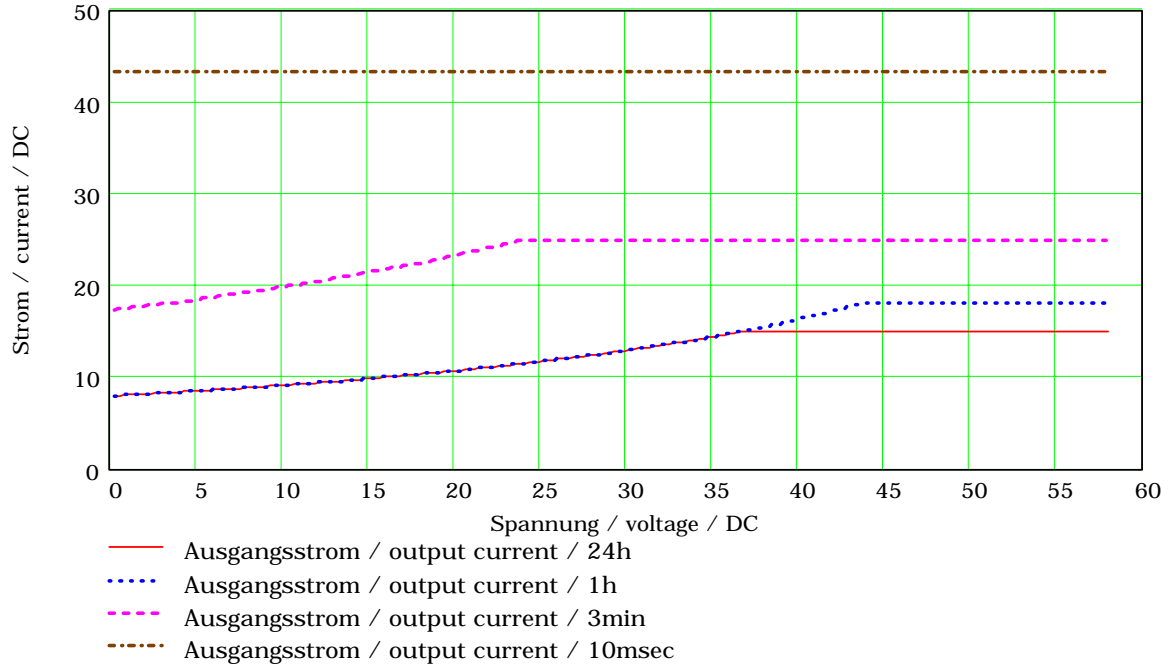


Current / voltage range: 34V



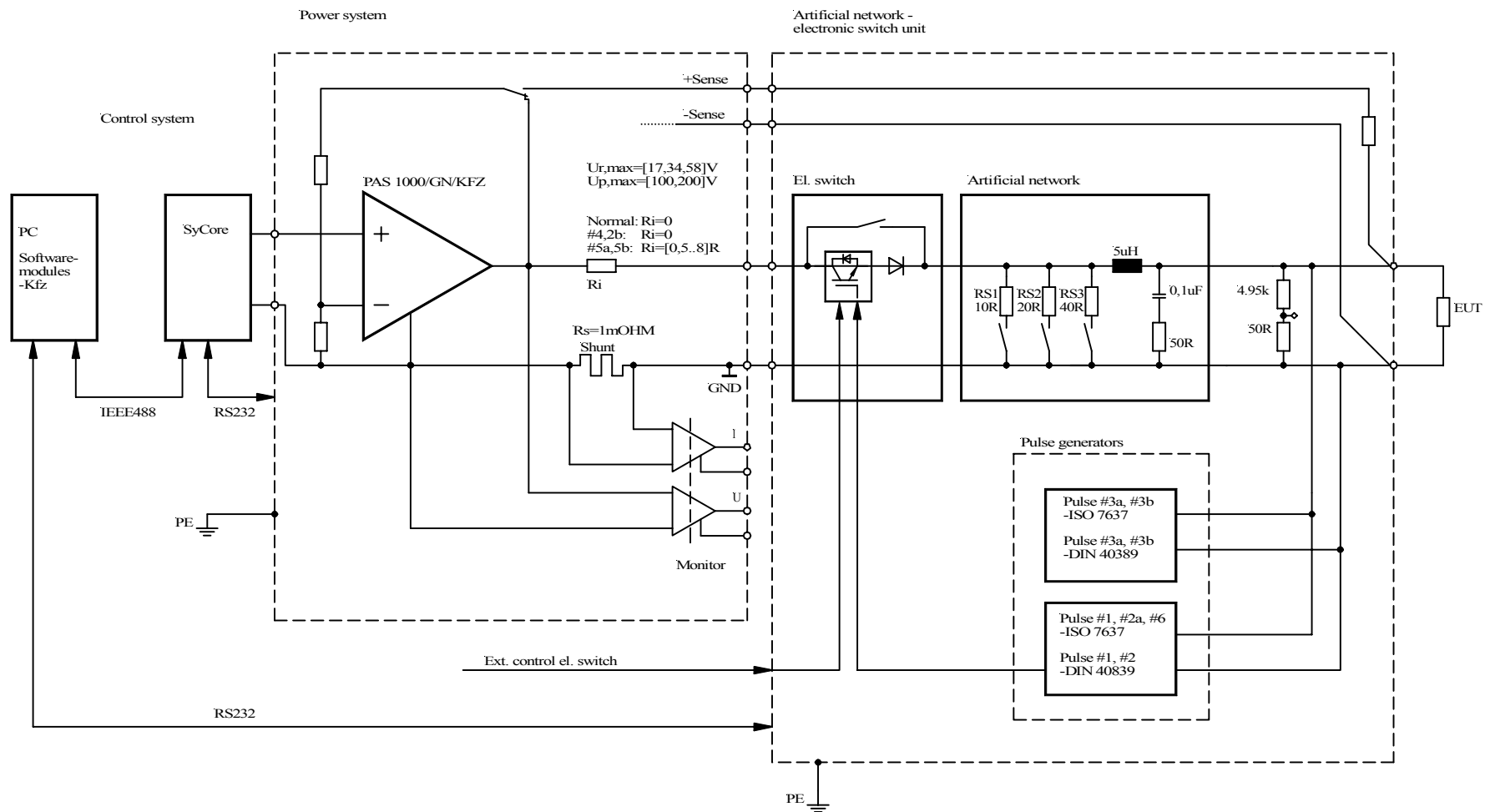


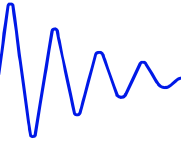
Current / voltage range: 58V





Principle diagram Automotive Supply Simulation System:

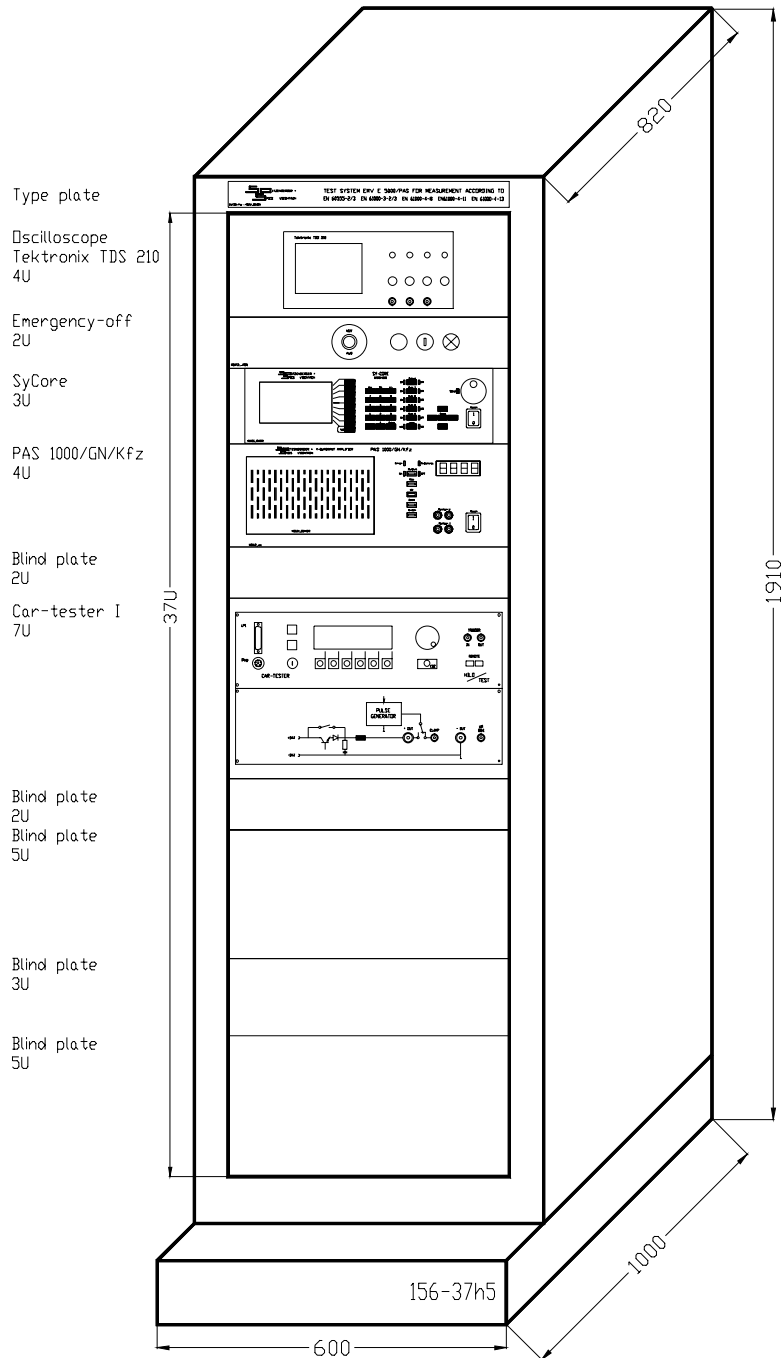




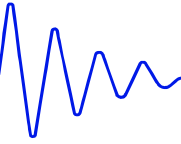
Automotive Supply Simulation System

PAS 1000/GN/Kfz

for measurements according to ISO 7637 Pulses 1 to 4 and 6



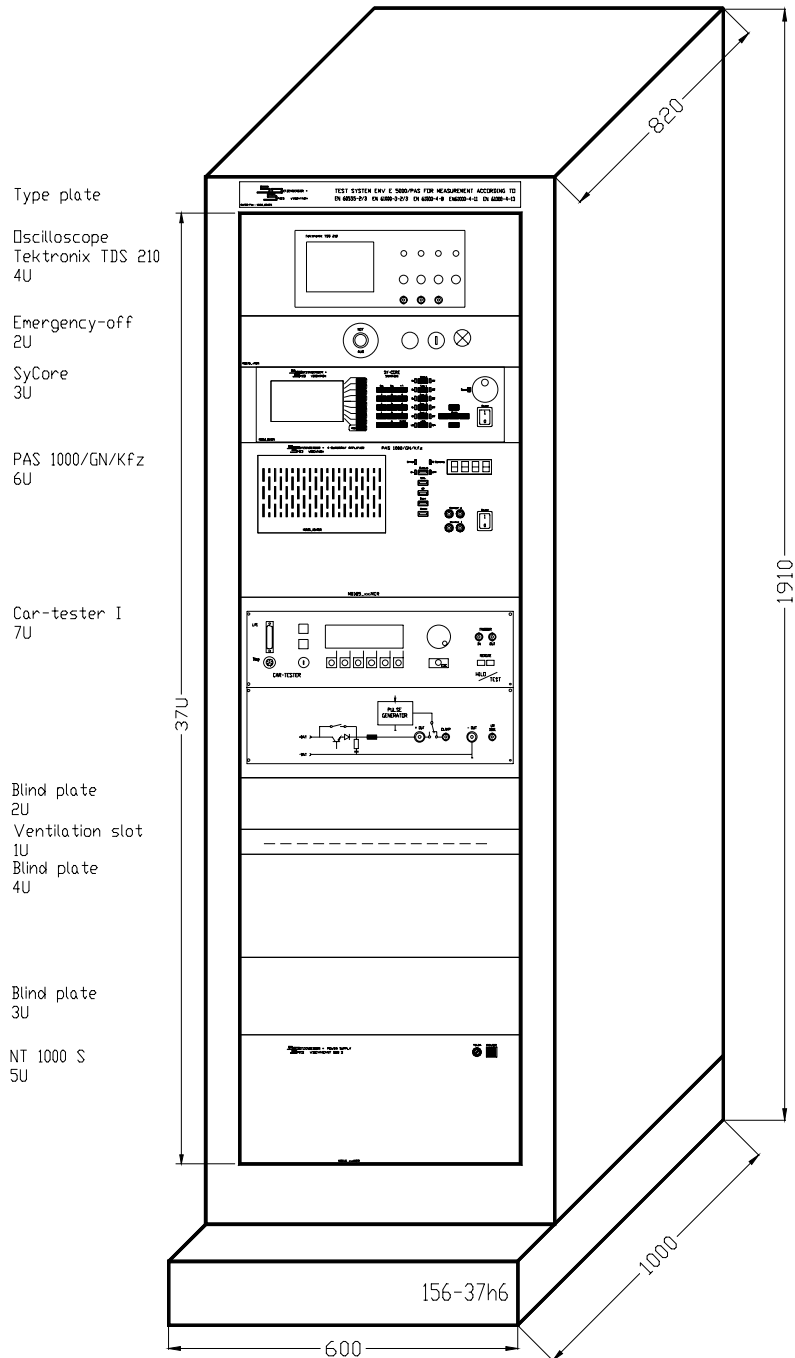
Power supply: 230V/400V with 16A-Cekon plug (5-pole)



Automotive Supply Simulation System

PAS 1000/GN/Kfz

for measurements according to ISO 7637 Pulses 1 to 6



Power supply: 230V/400V with 16A-Cekon plug (5-pole)