

PGA Programmable Gain Amplifier



	PGA16	PGA32	PGA64	PGA1632	PGA3264
Operating temperature	10 °C to 40 °C	10 °C to 40 °C	10 °C to 40 °C	10 °C to 40 °C	10 °C to 40 °C
Storage temperature	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C
Relative humidity	10 % to 85 %, non-condensing	10 % to 85 %, non-condensing	10 % to 85 %, non-condensing	10 % to 85 %, non-condensing	10 % to 85 %, non-condensing
Dimensions (W x D x H)	172 mm x 220 mm x 52 mm	172 mm x 220 mm x 52 mm	172 mm x 220 mm x 52 mm	172 mm x 220 mm x 52 mm	172 mm x 220 mm x 52 mm
Weight	1400 g	1400 g	1400 g	1400 g	1400 g
Supply voltage	± 5.7 V to ± 12 V DC	± 5.7 V to ± 12 V DC	± 5.7 V to ± 12 V DC	± 5.7 V to ± 12 V DC	± 5.7 V to ± 12 V DC
Supply current	350 mA (positive rail), 110 mA (negative rail)	550 mA (positive rail), 225 mA (negative rail)	725 mA (positive rail), 450 mA (negative rail)	550 mA (positive rail), 225 mA (negative rail)	725 mA (positive rail), 450 mA (negative rail)
Number of input channels	16	32	64	16	32
Input voltage	± 300 mV	± 300 mV	± 300 mV	± 300 mV	± 300 mV
Input impedance	> 10 ¹² Ω paralleled by 8 pF	> 10 ¹² Ω paralleled by 8 pF	> 10 ¹² Ω paralleled by 8 pF	> 10 ¹² Ω paralleled by 8 pF	> 10 ¹² Ω paralleled by 8 pF
Input noise	< 2 μV _{RMS} (full bandwidth, inputs short-circuited)	< 2 μV _{RMS} (full bandwidth, inputs short-circuited)	< 2 μV _{RMS} (full bandwidth, inputs short-circuited)	< 2 μV _{RMS} (full bandwidth, inputs short-circuited)	< 2 μV _{RMS} (full bandwidth, inputs short-circuited)
Noise density @ 1 kHz	$e_n = 25 \text{ nV} / \sqrt{\text{Hz}}$	$e_n = 25 \text{ nV} / \sqrt{\text{Hz}}$	$e_n = 25 \text{ nV} / \sqrt{\text{Hz}}$	$e_n = 25 \text{ nV} / \sqrt{\text{Hz}}$	$e_n = 25 \text{ nV} / \sqrt{\text{Hz}}$
Number of output channels	16	32	64	32	64
Output voltage	± 5 V	± 5 V	± 5 V	± 5 V	± 5 V
Output current	50 mA	50 mA	50 mA	50 mA	50 mA
Output impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Bandwidth	As specified	As specified	As specified	As specified	As specified
Filter slope	80 db/decade	80 db/decade	80 db/decade	80 db/decade	80 db/decade
Gain	Programmable from 10 to 5000	Programmable from 10 to 5000	Programmable from 10 to 5000	Programmable from 10 to 5000	Programmable from 10 to 5000

Programmable gain amplifiers with 16, 32, and 64 input channels are available under the name PGA16, PGA32, and PGA64, respectively.

The gain can be flexibly adjusted from 10 to 5000 with the program FiltAmp.

Amplifiers can be ordered with any bandwidth configurations by the user's choice. The name specifies the configuration. The first number after the channel number specifies the lowest frequency, followed by the highest frequency. For example, PGA16-300-3000 stands for a PGA with 16 channels, and 300 Hz to 3 kHz bandwidth.

The PGA1632 and the PGA3264 feature two different pass bands. Signals are split and the two pass bands are sent to two separate channels. For 16 input and 32 output channels, or 32 input and 64 output channels,

FiltAmp program

Operating system	Windows 98, ME, NT, 2000, or XP; English and German versions supported	Windows 98, ME, NT, 2000, or XP; English and German versions supported	Windows 98, ME, NT, 2000, or XP; English and German versions supported	Windows 98, ME, NT, 2000, or XP; English and German versions supported	Windows 98, ME, NT, 2000, or XP; English and German versions supported
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