AV CONDITIONER 3000

triple channel conditioner

introduction

AVC 3000 is a triple channel, portable conditioner for IEPE (ICP®) signal with built-in battery pack. Each channel has an independent control of gain level and frequency response. Settings can be adjusted by buttons on the front panel. The module has built in sensor circuit diagnostics and detects short and open circuits in the measurement chain.

The device status is indicated by LEDs on the front panel, which show as follows:

- Device On/Off
- Charging
- Open/Short circuit in the measurement chain
- Overload
- Gain level (x1, x10, x100)
- High pass and low pass filters status

AVC 3000 features innovative IEPE (ICP®) input conditioning circuit, which has a very short response time of the impulse excitations (e.g. force signal from sensor built in a modal hammer used for modal analysis) and high output signal stability in time (lack of voltage signal fluctuation at zero excitation, which is typical for standard IEPE (ICP®) signal conditioners). Configurable gain level (0dB, 20dB, 40dB) allows the module to be used with sensors having various sensitivity, as well as perform measurements in a wide range of excitation range.

The low pass and high pass filters (typically 10Hz and 1kHz) allow machine vibration measurements according to diagnostic norms. The high grade aluminum housing and the keypad made from durable foil make the device very suitable for work in harsh industrial environment. The battery power supply allows the measurements without access to the electrical socket.

technical data

PARAMETERS	DESCRIPTION
Number of channels (in/out)	3/3
Input type	IEPE (ICP®), 2.4 mA/24V
Signaling	On/Off, Charging , Open/Short, Overload, Gain, LP & HP Filters
Input impedance	100 kΩ
Output impedance	100 Ω
Gain	x1, x10, x100 (0dB, 20dB, 40dB)
Gain error	< 0,5 %
Gain drift	< 50 ppm/°C
SNR	> 90 dB (10 Hz – 22 kHz)
Frequency response	0,5 Hz to 100 kHz (optional 0,5 Hz to 300 kHz)
Distortions	< 0,1%
Output voltage range	20 Vpp
Offset error	10 mV
Low pass filter	1 kHz, 12 dB/okt
High pass filter	10 kHz, 12 dB/okt
Battery	NiMH with built-in charger, work time +/- 10h
Power supply	DC, 12V/400 mA
Dimensions	146 mm x 110 mm x 45 mm
Weight	850 g
Operational temperature	0°C ...+ 50°C
Storage temperature	-10°C ... +60°C

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WOULD YOU LIKE TO SEE HOW IT WORKS?

We offer a **free demonstration of the product!** Schedule it now and don't forget to ask about our **free of charge technical support service!**

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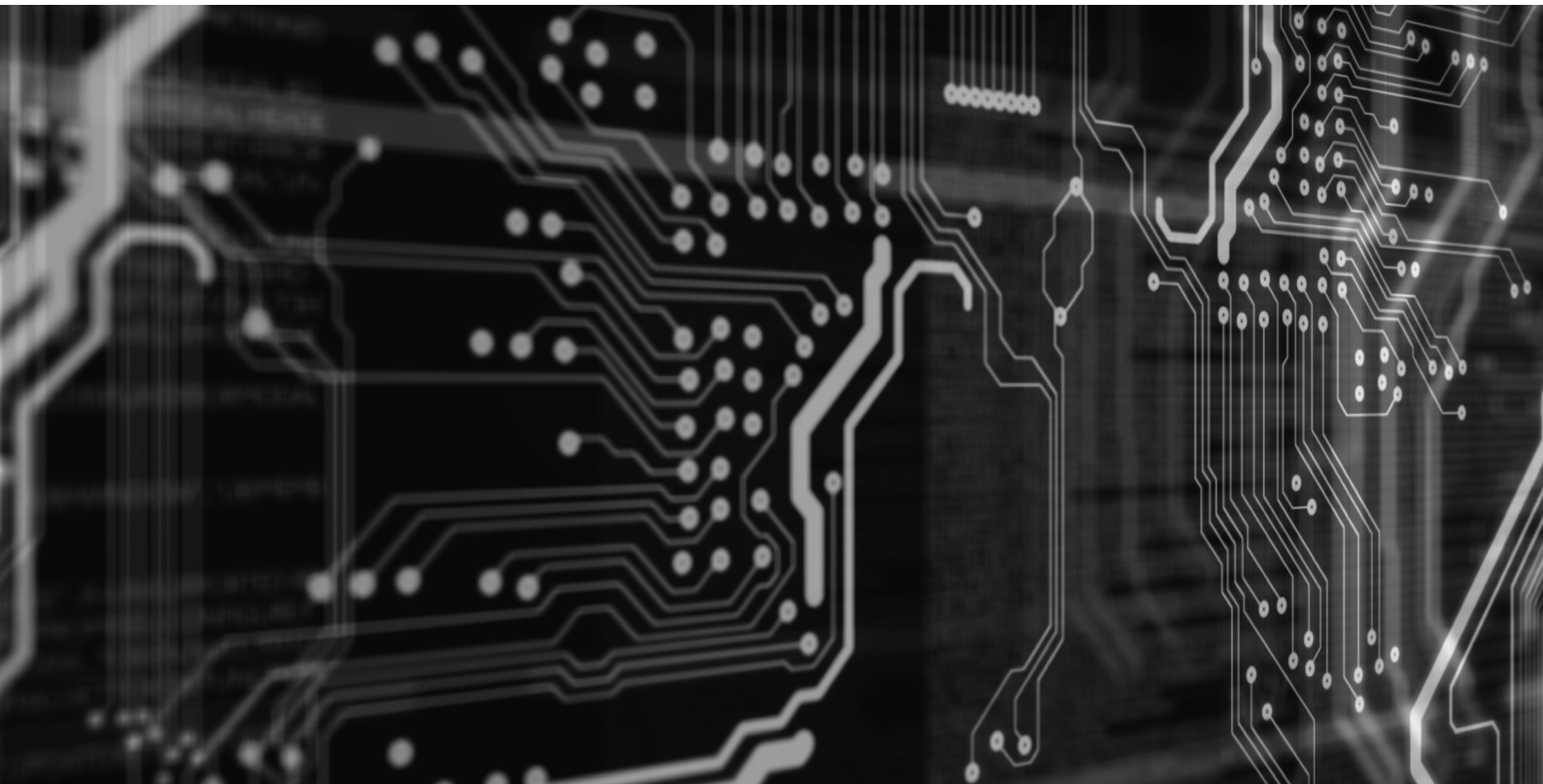
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