

VMS-1501

Sensor amplifier



About the sensor amplifier

When working with inductive sensors an initial low-level amplifying is an essential part of the measuring chain. This is why we pay big attention to the very first level of amplifying and why we developed our product VMS-1501. With VMS-1501 we have full control of the measuring chain, we are able to reflect every single sensor specific setting and behavior as they obviously differ regarding an installation setup placing, wiring or rotor position.

With the VMS-1501 you can choose a couple of output signals to use, such as Triggered differential digital signal, Differential raw analog signal from the sensor, or both. Obviously, a raw signal offers further signal processing and enhanced analysis in the VMS Front End Card, where functions such as multi-level triggering could be applied. On the other hand, the digital triggered signal could be used in cases where the sensor works with uniform signals, such as phase mark, and where no additional information is to be analyzed. For more information, please have a look at our FE Card product.

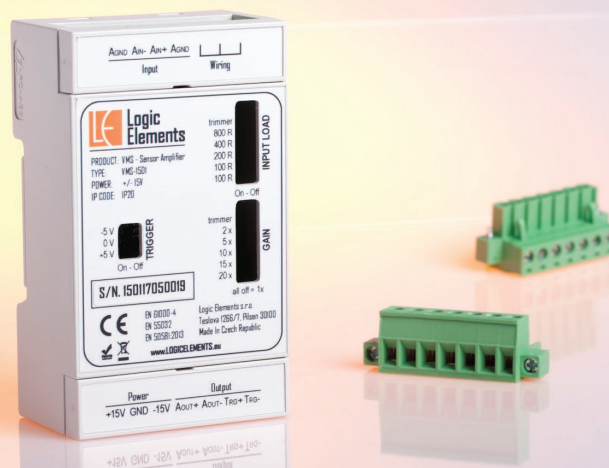
VMS-1501 is capable of amplifying steps from 1x up to 20x, and comparing the analog signal with configurable thresholds -5 V, 0 V, and +5 V. The output of the comparator drives the digital differential output that can be directly processed by the VMS system.

Parameters

Mounting	DIN 35 / 7.5
Width	3 modules
Power	+/- 15 V DC
Number of inputs / outputs	1 / 2
Amplifier range	1x up to 20x
Impedance range	100 R up to 1600 R

VMS-1501 specification

- Analog differential output
- Digital differential output
- 3 levels of triggering
- Gain range 1x up to 20x
- DIN rail mount



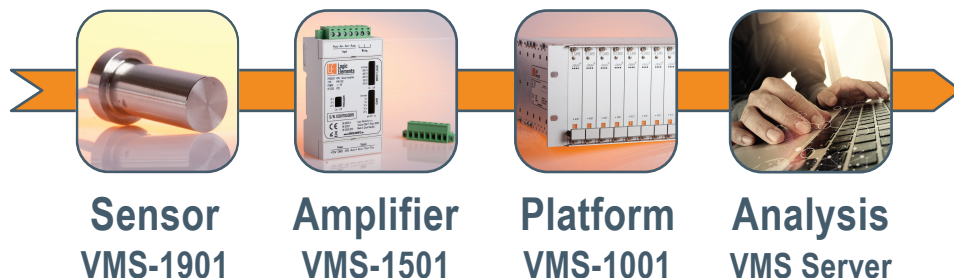
VMS-1501 Sensor amplifier

The sensor amplifier VMS-1501 is a mandatory part of the signal chain. Precise analysis needs precise signals, which mostly the time means low-noise amplifying. The amplifier needs to face the cruel industrial environment, an installation close to the turbine, and high temperature grade for electronic parts.

Whole signal chain is depicted in the figure below. It consists of VMS-1901 sensor, VMS-1501 amplifier, VMS-1001 base platform and VMS Server running the analysis software. Obviously, even though it is possible to place third party components into the signal chain, we reach best results, stability, and reliability of the chain with our products, which we are able to tune perfectly to the turbine demands.

Compatible sensors

- Inductive
- Eddy current
- Magneto-resistive



VMS Signal chain

During the past years we put our experiences with a couple of third-party sensors into the VMS-1501 amplifier. That is why it is successfully used along with third parties systems as the VMS-1501 is very convenient to install close to the turbine, setup threshold, and manage the wiring.

