

# PRODUCT RELEASE



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## Double the output voltage of two high voltage amplifiers by driving them in bridge mode

Falco Systems introduces two new phase inverter - buffers: the WMA-IB-HS and WMA-IB-LN. These products can be used to double the output voltage of two high voltage amplifiers, or as high impedance input buffers while maintaining precision, high speed and low noise.



Because of its high bandwidth, the **WMA-IB-HS** model is the ideal high speed phase inverter to drive the Falco Systems WMA-100 or WMA-300 amplifiers in bridge mode. It can also be used with all other Falco Systems amplifiers, or even with HV amplifiers of another brand.

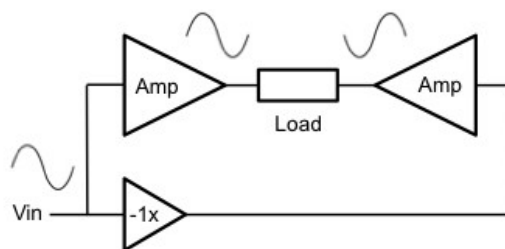
The ultra-low noise **WMA-IB-LN** model has been designed specifically for the Falco Systems WMA-200 high voltage amplifier. A WMA-IB-LN combined with two WMA-200 HV amplifiers provide unprecedented noise performance and output voltage range.

### Specifications WMA-IB-HS High speed phase inverter buffer

- High speed: DC - 20MHz @ -3dB full power bandwidth
- Output voltage: -10V to +10V maximum
- BNC input, BNC buffered output and BNC phase inverted output
- Switchable 50Ω /100kΩ input: buffer low-current signal sources for e.g. high-speed 50Ω amplifier inputs

### Specifications WMA-IB-LN Low noise phase inverter buffer

- Ultra-low noise: with 2 WMA-200 amps, the rms output noise is ~130uVrms, with 700Vpp output voltage range!
- Output voltage: -10V to +10V differential maximum
- BNC input, differential input, differential buffered output and differential phase inverted output



### Bridge mode

In bridge mode, the phase inverter - buffers can double the maximum output voltage available to drive a load such as a piezo actuator or electro-optical (EO-) modulator. The arrangement is shown in the image and electrical schematic above. The phase inverter - buffer drives two high voltage amplifiers with the same signal, but opposite polarity. The load is connected between the two outputs of the amplifiers, instead of the usual connection of the load between the output of an amplifier and ground.

For more information please visit [www.falco-systems.com](http://www.falco-systems.com)