

## Dear Reader,



During my time at tech school, one of our tasks in the electronics lab was to characterize control circuits. The method we used was quite simple, we had a sine wave generator and an oscilloscope. Each frequency point of the Bode diagram had to be measured separately, step by step - a very time consuming and quite boring exercise.

Well, these times are definitely over – nowadays Bode diagrams even for very slow control circuits can be easily measured with the Bode 100 starting from 1 Hz.

However, measuring the stability of a closed control loop is a different story. To do this, it is required to insert a signal into the closed loop. Our new wideband injection transformer B-WIT 100 is the right choice for this task. Enjoy your reading.

*B. Baumgartner*  
Bernhard Baumgartner

## Wideband Injection Transformer B-WIT 100

Customers have often asked what injection transformer we can recommend for the use with the Bode 100.

Well, now there is a clear answer: The **B-WIT 100**.

The B-WIT 100 combines a wide usable frequency range (1Hz – 10 MHz) with a fully 600 V Cat II compliant output. So no matter if you are analyzing slow control loops, DC/DC converters with high output voltages, or both. The B-WIT 100 is the only injection transformer you will ever need.

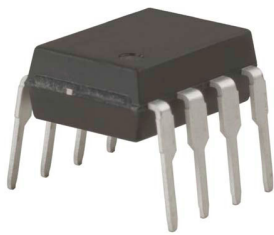
Just have a look at our webpage for [more information](#) including an [Application Note](#) that shows how to use the B-WIT 100 to assess the stability of step-down DC/DC converters.



## Op-Amps: Open Loop Gain Measurement.

At first glance, measuring the open loop gain of operational amplifiers seems to be a simple task. But really accurate measurement results especially at very low frequencies are more difficult to get than one might think. Triggered by a measurement application at a German university of applied science, we had a closer look at this measurement issue.

The result is an application note that describes how the DC-Gain, poles, open loop gain as well as the transit frequency of an Op-Amp can be measured with the Bode 100. You can [download](#) this App-Note from our webpage.



## Got Apps?

We are always interested in how our customers use the Bode 100 and like to publish these examples on our webpage. So if you have performed a great measurement with the Bode 100, have a unique application, or programmed an automation interface application for a programming language not yet listed on our webpage just send it to us.

We will reward all examples we publish on our webpage with a great, limited edition, not available in stores, genuine OMICRON Lab Swiss Army Knife.

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