

## Evaluating Magnetic Components

### [Application]

PZ4000 makes various evaluations of magnetic components as below;

#### Measurement of impedance (Inductance), phase angle and (power) loss.

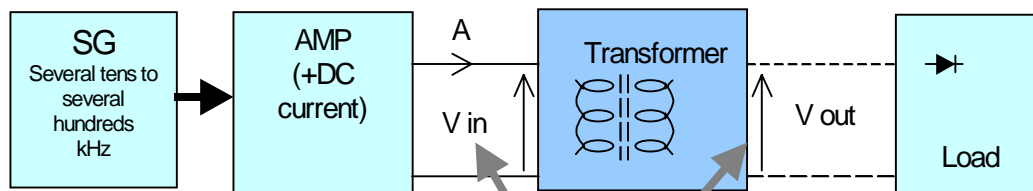
PZ4000 measures various parameters of impedance (Inductance), phase angle and (power) loss from high-frequency signals impressed on magnetic components, and displays such parameters.

#### Measurement of loss of the transformer

PZ4000 with 4 input modules measures loss of primary and secondary output of the transformer.

#### Measurement of Inductance characteristics including DC current

Characteristic measurements, including DC current and inductance is measured by impressing a distorted AC signal of several tens to several hundreds kHz with changing DC current. PZ4000 can measure both the high frequency distorted waveform and the DC.



Display  
-Impedance  
(Inductance)  
-Phase angle  
-(Power)loss

Fig.1. Example of connection



PZ4000

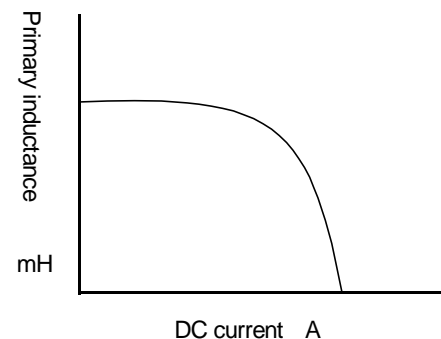


Fig.2. Example of characteristics including DC

### [Solution Features]

#### #Performance required from the power meter

- Measurement of impedance (Inductance), phase angle, and (power) loss
- High-precision measurement of distorted waveform signals including DC
- Calculation of efficiency and loss of input and output with multi input modules

#### #Benefits for the user

- The PZ4000 performs the functions of three instruments. Waveform observation, value display and harmonic measurements are performed in one instrument, saving the user test and evaluation time, cost and space for many instruments. The measuring results are highly reliable because the numeric calculations are based on the waveform data.
- You can input signals without using isolated amplifiers or current sensors. This reduces the error of such accessories.