Fluxmeter M-FLUX X100

Fluxmetric Metrology

A Fluxmeter is an integrator of voltage. The physical principle of fluxmetric measurement is:

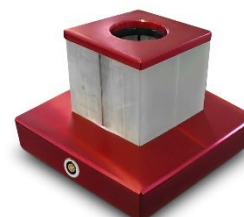$$U_{ind} = d\phi/dt$$

$$\phi = \int U_{ind}\, dt$$

The measurement result equals to the flux ϕ through the measurement coil.
Different magnetic values such as Flux, Flux density, Field strength, Dipole moment or Potential can be measured by use of different measurement coils.

Measuring it all!

- Total flux integration of permanent magnets and magnet assemblies with highest precision
- First principle method
- Setup of 1 – 3 channels
- Drift compensation
- A variety of customized measuring probes with automatic detection available

Magnetic dipole moment 1D / 3D

Local flux transversal / axial

Total flux of rotors / stators

Technical Data:

Color touch display	*Only* available for desktop version! • Easy to use colour touch display • Simultaneous display of user selectable result • Access control by password to prevent uncontrolled changed to configuration
Units	• Flux in Vs, Maxw, Wb • Flux density in T, G, A/m, Oar • Potential in A, Gb • Dipole moment in Vsm, Am² • Temperature in C, K, F • Angle (only 3-channel version) in Deg, Rad
Measurement	• Resolution: 0.01 µVs • Input resistance: 20 kΩ • Linearity error: < 0.01 % • Repeatability error: < 0.02 % • Selectable line frequency filter • Selectable averaging filter
Measurement ranges	• 4 ranges: ± 500 µVs, ± 5 mVs, ± 50 mVs, ± 500 mVs • Manual or automatic range selection • Input signal up to 200 V independent of range
Dedrift	• Ultra-low drift analog precision circuitry • User selectable automatic dedrift
Comparators	• Configurable comparators
Interfaces	Ethernet connectivity and complete API for remote operation • Standard RJ45 connector • Manual IP assignment for DHCP Optional 8 isolated digital inputs and outputs
Supply	Universal line input voltage range 85 V - 264 V, 47 Hz – 63 Hz integrated version 24 V DC

M-FLUX X100 **as DIN rail version:**

- Using magnetizers HMI

- Easy integration via Ethernet

- Clear O.K./ Not O.K. output

- 100% quality control in production