

IWATSU

B-H/ μ analyzer

B-H/ μ Analyzer(50Hz - 1MHz) SY-8258

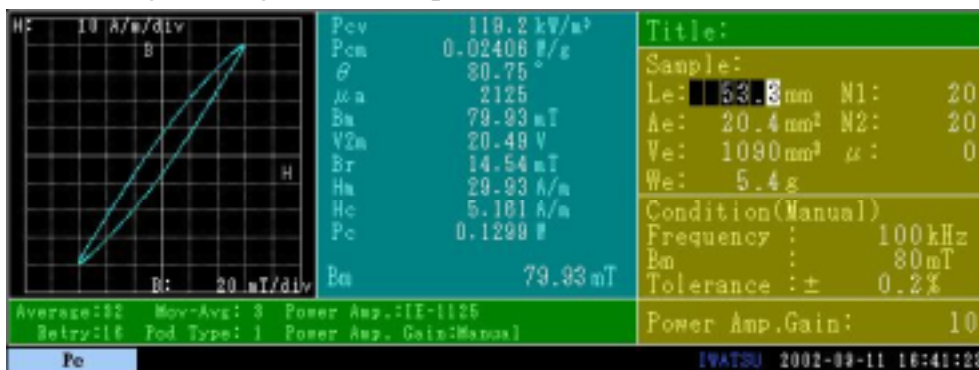


< General >

B-H/ μ Analyzer model: SY-8258 measures a AC magnetic characteristics of soft magnetic materials at the frequency range of 50Hz to 1MHz(1,000kHz). A R&D purpose, development stage, QA purpose and production line of material, core and component manufacturers would be suitable for it's applications. Furthermore, customers who has been introduced high-end BH analyzers such as the model: SY-8232 and SY-8217 would be recommended for it's secondary equipment with a high cost-performance BH- μ analyzer. The SY-8258 covers not only BH curve/ Core loss measurements but also μ i, L and Q measurements.

< Features >

- Wide frequency bandwidth at 50Hz to 1MHz
- Built-in measurement condition patterns at IEC or JIS standard basis
-> easier operation, manual operation also available
- Wide Hm(Magnetic field) and Bm(Magnetic flux density) detecting sensitivities
-> AC initial permeability(minor loop) and Bm(maximum flux density, major loop) are available.
- μ i(initial permeability)/L(inductance)/Q(Q-factor) measurements
- LAN interface is available(Optional)
-> Measurement results would be transferred into PC via LAN(Local area network).
- 640×240 dots color LCD displays parameters at high resolution
- Desk-top size, light weight(60% of previous models)



<Pc measurement display >



< Measurement condition display >

B-H/ μ analyzer: SY-8258 specifications

Measurement method	Cross power method
Measurement modes	Bs, Pc, B-H and μ i
Measurement items	Characteristics data, Saturated flux density(Bs), Cohesive force(Hc), Residual flux density(Br), Square ratio(Br/Bm), Core loss(Pc, Pcv, Pcm), Amplitude permeability(μ a), Phase angle(), AC initial permeability(μ i), Inductance(L), Q factor
Waveform display	BH curve, Excitation current/ Induced voltage/ Magnetic field/ Flux density
Measurement Frequency	50Hz to 1MHz within +/-0.1%
Oscillator Output	Maximum +/-3.0V
Magnetic field detection	Voltage detection method of Non-inductive resistance at 1ohm(+/-1%) +/-5mA of full scale to +/-5A of full scale
Flux density detection	Inducing voltage detecting coil method +/-5mV of full scale to +/-200V of full scale
Resolution of digitizer	14 bits
Specimen connecting method	2-coil winding method(Excitation coil & detection coil) or 1-coil method
Measurement accuracy	note1), note2) H and B amplitude measurement accuracy: +/-3% or less (at 80% of each range of 50mA and 50mV range or above) Phase measurement accuracy: +/-0.15 degree or less(at 80% of each range of 50mA and 50mV range or above)
Measurement time	Approx. 3seconds at frequency of 1kHz or above and tolerance of +/-5% or above
Display	Color LCD(640dots x 240dots with backlit)
Power supply	100V~120V or 200~240V, AC(Automatically selective), 50Hz/60Hz
Power consumption	Approx. 150VA MAX
Weight and dimensions	Approx. 15kg, 430W x 177H x 480L at +/-2[mm]
Environmental conditions	Accuracy warranted at +18deg. to +28deg and humidity of 85%RH(+35) or lower
Pre-heat time	All the specification are performed after 60min. at accuracy warranted environmental conditions and keeping +/- 1deg.
Options	LAN interface, GP-IB interface, Thermal printer (roll thermal paper at 112mm width)
Standard accessories	Power connecting cable x1, SMA to BNC cable x1 and instruction manual x1
note1)	Conditions for above at 23 deg. +/- 5 deg. after 1 hour warming up with the standard measurement POD compensation
note2)	Measurement accuracy will be followed by material property and measurement conditions.

Design and specifications subject to change without notice.

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