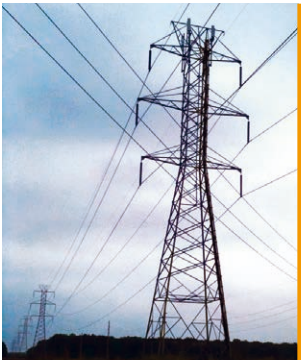




Providing robust support for 3-axis magnetic flux density measurement



Measurement of environmental magnetic fields



Measurement of magnetic fields in the vicinity of electrical power equipment



Compliance testing of household appliances

Features

1. Simple operation for easy measurement

Procedure for measuring magnetic flux density (in microteslas)

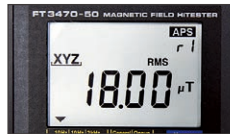
1 Set the mode Magnetic flux density mode covers the entire range from 10 Hz to 400 kHz.



2 Position the probe



3 Measure the magnetic flux density



ADVANTAGE

The FT3470-50 series can also be used to measure exposure levels as defined by IEC/EN 62233 (compliant with the ICNIRP 2010 guidelines).

2. User-selectable display units



T (Tesla)
SI unit of magnetic flux density
*1μT=10mG



A/m
SI unit of magnetic field strength



G (Gauss)
Unit of magnetic flux density

ADVANTAGE

The FT3470-50 series can use different units of magnetic flux density as required by the applicable standard or regulation.

3. Two 3-axis sensors

Select from two differently sized sensors according to the needs of your application.



100cm² Sensor

Ships with the **FT3470-51** and **FT3470-52**
Standard sensor for use with the IEC/EN 62233 standard.
φ122×295Lmm, 220g



3cm² Sensor

Ships with the **FT3470-52**
Enables detailed analysis of magnetic field distribution for measurement targets.
□27×165Lmm, 95g

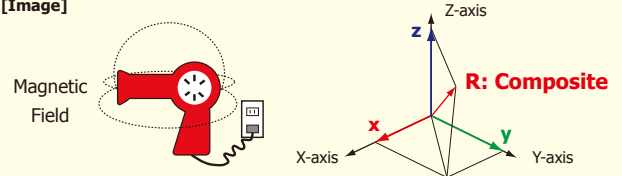
ADVANTAGE

The X-, Y-, and Z-axes of Hioki's 3-axis sensors are labeled, making it easy to identify the direction of magnetic fields.



What is Three-Axis Measurement?

[Image]

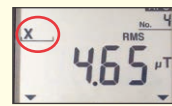


The area of magnetic influence that occurs around an object through which a current is passing is termed a magnetic field. Because the values obtained when measuring a magnetic field vary with direction due to the field's directionality, it is necessary to measure all three axes of the magnetic field.

The FT3470-50 Series is capable of accurate measurement because **it measures three axes simultaneously** and calculates the composite (R) value. It can also **measure each axis (X, Y, and Z) separately**.



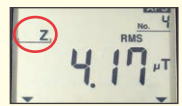
R: Composite [XYZ]



X-axis measurement [X]



Y-axis measurement [Y]



Z-axis measurement [Z]

Also consider: POWER QUALITY ANALYZER PW3198

Record and Analyze Power Supply Problems Simultaneously with a Single Unit
The New World Standard for Power Quality Analysis



- Assess power quality problems in accordance with international standards (IEC61000-4-30 Class A)
- High-precision, gapless recording (V: ± 0.1 % rdg., A and W: ± 0.2 % rdg. ± 0.1 % f.s.)
- CATIV 600V - Safe enough for incoming power lines
- High-order harmonics and up to 80kHz bandwidth
- Wide dynamic input range and rated up to 6000V peak
- All standard interfaces included (LAN, USB, SD card)
- Synchronize multiple devices with optional GPS BOX

Specifications (Accuracy guaranteed for 1 year)

Measurement accuracy will be maintained when the tester and sensor are used in an environment where the temperature is 23°C ±5°C and humidity is 80% RH or less with no condensation

Basic specifications

Magnetic flux density	10Hz to 400kHz/ 10Hz to 2kHz/ 2kHz to 400kHz
Exposure level	General Public/ Occupational
Indicated axes	X, Y, Z/ R (measured axes: X, Y, Z)
Measurement method	True RMS
Range switching	Auto/ manual
Display update rate	Slow function off: 250msec. Slow function on: 2sec. (Slow function: Functionality for applying the 1-sec RMS value integration time required by IEC/EN 62233)
Crest factor	3 or less But exposure level (occupational) for r1 is 1.45 or less.
Function	Switching magnetic flux density (T, A/m, G), Slow function, Maximum value hold, Memory function (99 measurements), Auto power off, Buzzer sound
Interface	USB1.1
Storage environment	-10 to 50°C, 80% RH or less (no condensation)
Operating environment	0 to 40°C, 80% RH or less (no condensation)
Period of guaranteed accuracy	1 year
Power supply	Four LR6 alkaline batteries 1.5V, Rated power supply voltage DC1.5V×4, AC adapter 9445-02
Continuous usage	Approx. 10 h (with sensor connected, continuous, low load operation)
Dimensions	100W×150H×42D mm (3.94"W×5.91"H×1.65"D)
Mass	830g (29.3 oz)
Applicable standards	Safety EN61010 EMC EN61326, EN61000-3-2, EN61000-3-3
Standard compliance	IEC61786

Output

Output mode	Magnetic flux density (T), Exposure level (%)
Output type	MON Waveform output for each axis (X, Y, Z)
	REC Composite RMS value level output (output via the X-axis) Exposure level output (output via the X-axis)
Output accuracy	MON ±3.5% rdg. ± 10mV
	REC ±3.5% rdg. ± 3mV (±5.0% rdg. ± 3mV when the exposure level is or exceeds 1kHz)
Output rate	0.1 mV/display value count An output rate based on the magnetic flux density unit T is used.

Magnetic flux density accuracy specifications

FT3470-51/52 (with 100cm² Sensor)

Measurement items	Range	Measurement mode	Prescribed accuracy range	Measurement accuracy
X Y Z	r0	10Hz-400kHz	0.050 to 2.000 μT	±3.5% rdg. ± 0.5% f.s. (50Hz to 100kHz when in 10Hz-400kHz mode)
	r1	10Hz-2kHz	0.50 to 20.00 μT	
	r2	2kHz-400kHz	5.0 to 200.0 μT	
R	r0	10Hz-400kHz	0.050 to 2.000 mT	±3.5% rdg. ± 0.5% f.s. (50Hz to 100kHz when in 10Hz-400kHz mode)
	r1	10Hz-2kHz	0.100 to 3.464 μT	
	r2	2kHz-400kHz	1.00 to 34.64 μT	
	r3		10.0 to 346.4 μT	
	r3		0.100 to 3.464 mT	

FT3470-52 (with 3cm² Sensor)

Measurement items	Range	Measurement mode	Prescribed accuracy range	Measurement accuracy
X Y Z	r0	10Hz-400kHz	0.200 to 2.000 μT	±3.5% rdg. ± 0.5% f.s. (50Hz to 100kHz when in 10Hz-400kHz mode)
		10Hz-2kHz		
	r1	10Hz-400kHz	0.050 to 2.000 μT	
	r2	10Hz-2kHz	5.0 to 200.0 μT	
	r3	2kHz-400kHz	0.050 to 2.000 mT	
R	r0	10Hz-400kHz	0.400 to 3.464 μT	±3.5% rdg. ± 0.5% f.s. (50Hz to 100kHz when in 10Hz-400kHz mode)
		10Hz-2kHz		
	r1	10Hz-400kHz	0.100 to 3.464 μT	
	r2	10Hz-2kHz	1.00 to 34.64 μT	
	r3	2kHz-400kHz	10.0 to 346.4 μT	
	r3		0.100 to 3.464 mT	

Exposure level (General Public/ Occupational)

Measurement items	Range	Measurement mode	Measurement accuracy
X, Y, Z	r0	0.50 to 20.00 %	±3.5% rdg. ± 0.5% f.s. for smoothed edge 50 Hz to 1 kHz operation
	r1	5.0 to 200.0 %	
R	r0	1.00 to 34.64 %	±5.0% rdg. ± 0.5% f.s. for smoothed edge 1 kHz to 100 kHz operation
	r1	10.0 to 346.4 %	

*Smoothed edge: Exposure level is here defined as the time domain evaluation introduced in IEC/ EN 62233 applied to the magnetic flux density indicated in the ICNIRP 2010 Guidelines.)

Ordering Information



Model : MAGNETIC FIELD HiTESTER FT3470

Model No. (Order Code) (Note)

FT3470-51 (100 cm² Sensor bundled)

Accessories: 100 cm² Sensor ×1, Instruction manual ×1, CD-R (PC application software Data Viewer for FT3470) ×1, USB cable ×1, LR6 (AA) alkaline battery ×4, AC adapter (9445-02 or 9445-03) ×1, Carrying case ×1

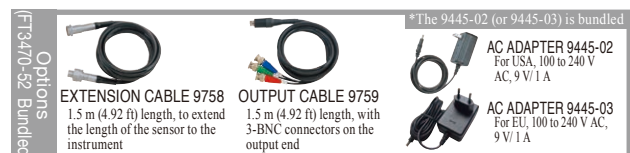


Model : MAGNETIC FIELD HiTESTER FT3470

Model No. (Order Code) (Note)

FT3470-52 (100 cm² Sensor, 3 cm² Sensor bundled)

Accessories: 100 cm² Sensor ×1, 3 cm² Sensor ×1, Instruction manual ×1, CD-R (PC application software Data Viewer for FT3470) ×1, USB cable ×1, LR6 (AA) alkaline battery ×4, AC adapter (9445-02 or 9445-03) ×1, Extension cable 9758 ×1, Output cable 9759 ×1, Carrying case ×1



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