HIOKI

New

TACHO HiTESTER FT3405, FT3406

Environmental Measuring Instruments







Rugged Design and Optimal Functionality

CE

Safety

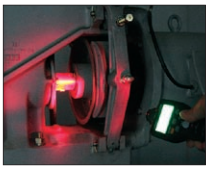
✔ *Long non-contact distance*

The FT3405 and FT3406 has a detection distance 2.5 times greater than its HIOKI predecessor, extending the distance from moving parts for added safety.

HIOKI 3403/ 3404	200 mm/ 7.8"
HIOKI FT3405/ FT3406	**500mm/ 19.7"**

✔ *Red LED*

The red LED lets you continuously focus on the measurement spot even when testing from afar.



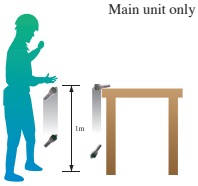
Reliability

✔ *DROP PROOF*

DROP PROOF

Main unit only

Testers are built tough to withstand a 1-meter drop onto a concrete floor.



✔ *Dust-proof construction*

IP50 dust-proof structure makes the Tacho HiTESTERs tough against the dirt and dust that are unavoidable in field environments.



<Image>

Convenience

✔ *Contact Testing Also Available*

By using the optional Z5003 contact adapter, the FT3405 and FT3406 become contact-type tachometers.



✔ *Signal Output*

FT3406 only

With the built-in analog output and pulse output functions, you can record the variations in rotation by connecting the Tacho HiTESTER to a recorder or data logger. Use an AC Adapter with the FT3406 for long-term measurements.



ISO 9001 JMI-0216

ISO14001 JQA-E-90091

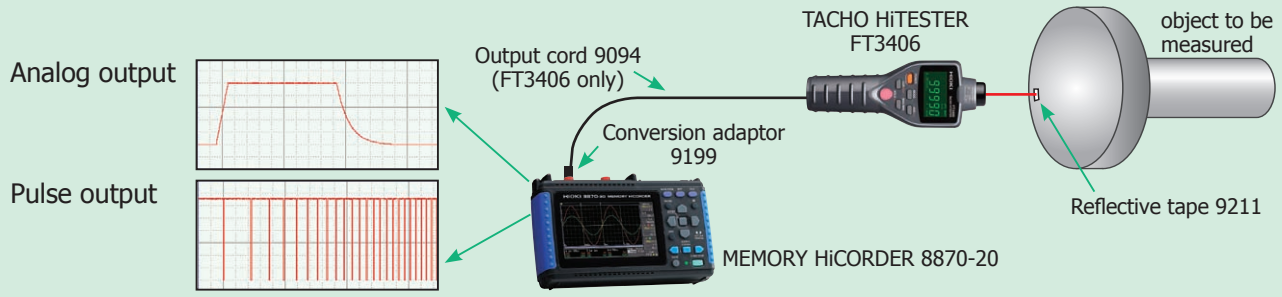
INTERNET HIOKI Website

www.hioki.com

HIOKI company overview, new products, environmental considerations and other information are available on our website.

Waveform Recording

Measure signal variations with a waveform recorder or data logger by using the FT3406's analog output or pulse output functions. Use a multi-channel logger in combination with input from other types of sensors, or a multi-channel recorder to simultaneously measure voltage and current.



Specifications

Guaranteed accuracy period: 1year

Measurement method	Using red visible-spectrum light and reflective tape or a reflective plate (Z5003 Contact Adapter)
Display	Transmissive FSTN LCD
Range switching	Automatic
Detection range	50mm to 500mm (1.97" to 19.7")
Reflection detection indicator	Flashing red LED built into [HOLD] key, buzzer
Sampling period	62.5 ms to 2 s (depending on usage conditions)
Display refresh rate	Approx. 0.5 to 10 times/sec
Drop proof	1m onto concrete surface
Dustproof and waterproof	IP50 (EN60529)
Functions	MAX/MIN display, Display hold, Average, Auto power save, Buzzer, Backlight function
Operating temperature	0 to 50°C (32 °F to 122 °F)
Operating humidity	Up to 40°C (104 °F) 80%RH or less 40°C to 45°C (104 °F to 113 °F) 60%RH or less 45°C to 50°C (113 °F to 122 °F) 50%RH or less (non-condensing)
Storage temperature and humidity	-10°C to 50°C (14 °F to 122 °F), 80%RH or less (non-condensing)
Applicable standards	EMC : EN61326, EN61000-3-2, EN61000-3-3 Safety : EN61010
Power supply	LR6 alkaline battery×2 AC ADAPTER Z1004 (FT3406 only)
Maximum rated power	0.5VA
Continuous operating time	Approx. 30 hours (FT3405) or approx. 25 hours (FT3406); When using alkaline batteries with buzzer off
Dimensions	Approx.71W×186H×38D mm (2.80"W×7.32"H×1.5"D)
Mass	Approx. 230g (8.1oz.) (with batteries)

FT3406 only

Analog output	Output level: 0-1Vf.s., Output resistance: 1kΩ, Accuracy: ±2%f.s., Accuracy guarantee temperature and humidity range:23°C±5°C, 80%RH or less, Temperature coefficient:Add [accuracy specifications x 0.1 x (|T-23|)], where T is the operating temperature [°C].No temperature coefficient for 18°C to 28°C range.
Pulse output	Output leve:0-3.3V±0.3V, Output resistance:1kΩ
Functions	Power input terminal, AC adapter detection, output terminal setting

Specifications

Note 1: The lowermost digit is fixed at 0 at speeds of 20,000r/min and greater.
Note 2: The lowermost digit is fixed at 0 when the averaging setting is off.

[Tacho Testing]

MODE	Non-contact		Contact	
	AVG=ON	AVG=OFF	AVG=ON	AVG=OFF
r/min	30.00 to 199.99		15.00 to 199.99	
	200.0 to 1999.9	300.0 to 1999.0	200.0 to 1999.9	150.0 to 1999.0
	2000 to 19999	2000 to 19990	2000 to 19999	2000 to 19990
	20000 to 99990	20000 to 99990		
r/s	0.5000 to 1.9999		0.2500 to 1.9999	
	2.000 to 19.999	5.000 to 19.990	2.000 to 19.999	2.500 to 19.990
	20.00 to 199.99	20.00 to 199.90	20.00 to 199.99	20.00 to 199.90
	200.0 to 1600.0	200.0 to 1600.0	200.0 to 333.0	200.0 to 333.0
Cycle (ms)	0.6000 to 1.9999	0.6000 to 1.9990		
	2.000 to 19.999	2.000 to 19.990	3.000 to 19.999	3.000 to 19.990
	20.00 to 199.99	20.00 to 199.90	20.00 to 199.99	20.00 to 199.90
	200.0 to 1999.9		200.0 to 3999.9	200.0 to 399.0

[Count Testing]

count	0 to 999999 (Input conditions: Up to rotational speed measurement upper limit)

[Cycle Speed]

MODE	Contact	
	AVG=ON	AVG=OFF
Cycle (m/min)	1.500 to 19.999	
	20.00 to 199.99	15.00 to 199.90
	200.0 to 1999.9	200.0 to 1999.0
Cycle (ms)	0.0250 to 1.9999	0.2500 to 1.9990
	2.000 to 19.999	2.000 to 19.990
	20.00 to 33.30	20.00 to 33.30

Accuracy:

	AVG=ON	AVG=OFF
Up to 9999 counts	±1dgt.	±10dgt.
10000 counts or more	±2dgt.	±20dgt.
20000 counts or more (r/min mode only)	±20dgt.	±100dgt.
Period measurement only	±0.5%rdg. is added to above-mentioned accuracy.	

Bundled Accessories

Reflective tape 9211 (1 sheet)
Output cord 9094 (FT3406 only)

Carrying case



Option



Contact Adapter Z5003 (includes 9032, two 9033 and 9212)



Metal contact tip 9032



Rubber contact tip 9033



Peripheral ring 9212



Reflective tape 9211 (10 sheets)
(30 pieces per sheet, each piece 12 × 12 mm)

FT3406 only



AC Adapter Z1004

Note: Company names and Product names appearing in this catalog are trademarks or registered trademarks of various companies.

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