Rugged Design and Optimal Functionality

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*

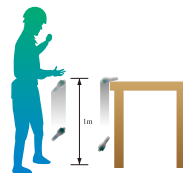The red LED lets you continuously focus on the measurement spot even when testing from afar.

Reliability
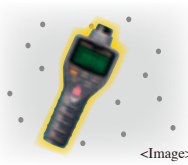
✔ *DROP PROOF*

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.
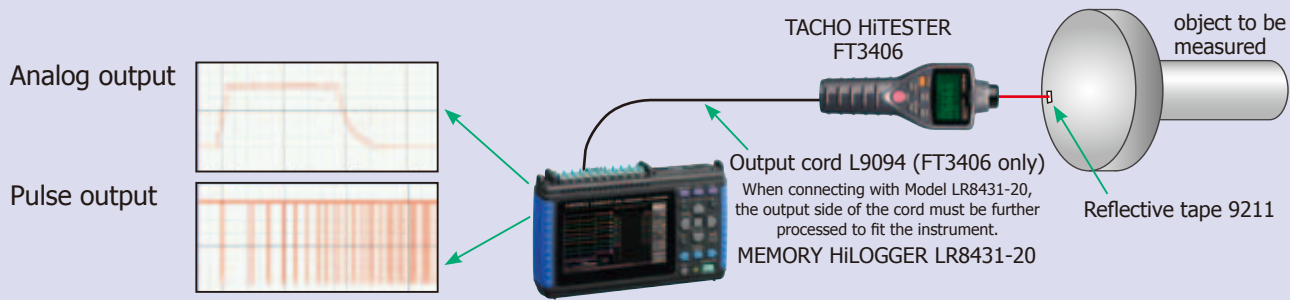
✔ *Signal Output* FT3406 only

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.

CE   3year Guarantee   DROP PROOF

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.

Analog output

Pulse output

TACHO HiTESTER FT3406

object to be measured

Output cord L9094 (FT3406 only)
When connecting with Model LR8431-20, the output side of the cord must be further processed to fit the instrument.

MEMORY HiLOGGER LR8431-20

Reflective tape 9211

■ Specifications

Guaranteed accuracy period: 1year

Measurement method	Using red visible-spectrum light and reflective tape or a reflective plate (Contact adapter Z5003)
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 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:

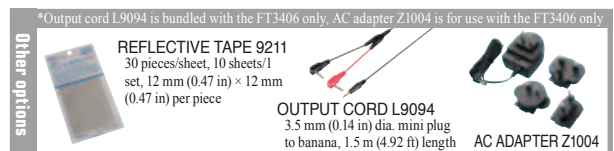|	AVG=ON	AVG=OFF
Up to 9999 counts	±1dgt.	±10dgt.
10000 counts or more	±2dgt.	±20dgt.
20000 counts or more (r/min mode only)	±20dgt.	±100dgt.
Period measurement only	±0.5%rdg. is added to above-mentioned accuracy.	

Model : TACHO HiTESTER FT3405, FT3406

Model No. (Order Code) (Note)
FT3405
FT3406 (with analog output, pulse output)
Accessories: Instruction manual ×1, Reflective tape 9211 ×1 sheet (30 pieces/ 12 mm (0.47 in) × 12 mm (0.47 in) per piece), Carrying case C0202 ×1, LR6 (AA) alkaline battery ×2, *FT3406 only: Output cord L9094 ×1

CE

Options

*Carrying case C0202 is bundled

CONTACT ADAPTER Z5003 (includes 9212 ×1, 9033 ×2, 9032 ×1), set model

PERIPHERAL RING 9212

RUBBER CONTACT TIP 9033

METAL CONTACT TIP 9032

CARRYING CASE C0202

Other options

*Output cord L9094 is bundled with the FT3406 only, AC adapter Z1004 is for use with the FT3406 only

REFLECTIVE TAPE 9211
30 pieces/sheet, 10 sheets/1 set, 12 mm (0.47 in) × 12 mm (0.47 in) per piece

OUTPUT CORD L9094
3.5 mm (0.14 in) dia. mini plug to banana, 1.5 m (4.92 ft) length

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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