

The Series DT-100A Tachometer with micro-processor technology has heralded a superior standard in tachometer accuracy and capabilities for measuring and recording speeds of rotational, linear and surface plus total length. Offering unprecedented confidence, the DT-100A battery-operated tachometers feature the same rugged, high quality components that have made them the benchmark in the industry. These user-friendly, value-packed units feature memory storage; quick adjustment units knob; length functions; retrieval of last, maximum and minimum values; plus each unit comes standard with a free N.I.S.T. certificate. Units are available with an LCD or vibrant red LED display.

Incorporating the precise technology and user-friendly functions as the DT-100A, the DT-100A-S12 provides an exceptional accuracy in measuring speed and length via its 12" wheel. The larger wheel rotates more slowly than a standard 6" wheel, enabling reliable and safe registration of high speeds.



DT-105A

DT-107A

Features

- Outstanding accuracy allows usage in the strictest applications
- Exceptionally rugged die-cast aluminum housing enables usage in the harshest conditions
- Wide field selection of units in both instantaneous rate as well as totalized length satisfies a multitude of user requirements
- Large 5 digit display aids user visibility
- Expansive 10 measurement memory capacity allows quick retrieval of stored data plus additional last, max. & min. values
- Long-life battery (25-40 hrs. continuous use) eliminates concerns of being down during testing
- Compact, ergonomic design allows easy grip
- Rear threaded inserts provides option to mount to stand or other device
- Available display options of either LCD or vibrant, bright red LED
- CE Mark combined with free N.I.S.T. certificate provides peace of mind due to the quality of the instrument



Optional
DT105A-S12
with 12"
Circle Wheel



DT105A
Shown with
Included 6"
Circle Wheel



Standard
DT-100A in
Supplied
Case

DT-100A Specifications

Display Range	0.10 - 25,000RPM with floating decimal
Accuracy	±0.06 rpm: 0.10 - 999.9 rpm; ±0.6 rpm: 1,000.0 - 9,999.9 rpm; ±0.006% of reading ±1 digit (±2 rpm max.) 25,000 rpm
Display	DT-105A: 5 digit 0.47" (12 mm) high LED; DT-107A: 5 digit 0.4" (10 mm) high LED
Measuring Units	Revolution: RPH, RPM; Feet: FPH, FPM; Miles: MPH; Yards: YPH, YPM; Inches: IPM; Meters: mPH, mPM; Length: m, cm, inches, feet, yards; Total Revolutions: REV
Memory System	13 readings are stored in memory and retained for 5 minutes (last, max., min., and 10 extra measurements)
Detection	Optical coupler, 60 pulses/rev.
Update Time	1 second (typical)
Over Range Indicator	Flashing numerals
Power Requirement	2 AA 1.5V batteries (Life: Approx. DT-105A: 65 hrs.; DT-107A: 40 hrs.)
Operating Temperature	32° - 113°F (0° - 45°C)
Construction	Die-cast aluminum housing
Product Weight	0.9 lb (400 g)
Package Weight	Approx. 2 lb (.91 kg)
Approvals	CE
Dimensions	7.2" L x 2.4" W x 1.8"H (182.5 mm x 60 mm x 46 mm)
Warranty	2-Year
Included Accessories	2 cone adapters, funnel adapter, 3½" extension shaft, carrying case, NIST certificate, master wheel (6" cir.)
Options	-S12 Option: Same as DT-100A except 6" circumference wheel replaced with 12" circumference contact wheel

Ordering Details

DT-105A	LCD Contact Tachometer with included 6" contact wheel. Includes NIST certificate.
DT-105A-S12	LCD Contact Tachometer with included 12" contact wheel. Includes NIST certificate.
DT-107A	LED Contact Tachometer with laser sensor and contact adapter for use with included 6" contact wheel. Includes NIST certificate.
DT-107A-S12	LED Contact Tachometer with included 12" contact wheel. Includes NIST certificate.

Accessories

CONE	1/2 inch cone adapter
CONE-3/4	3/4 inch cone adapter
CONE-1-1/4	1-1/4 inch cone adapter
DT-CARRY100	Carrying case for handheld tachometers
EXT-SHAFT	3.5 inch extension shaft for handheld tachometers
FPM-12	12 inch circumference measuring wheel
FPM-6	6 inch circumference measuring wheel
FPM-6-GV	6 inch circumference grooved measuring wheel
FUNNEL	1/2 inch funnel adapter
NIST-TACH	NIST traceable certificate with data

Included Accessories



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Optional Accessories



FPM-12 (ft./min) 12" circle



FPM-6-GV (6" circle grooved wheel)

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SHIMPO INSTRUMENTS

Measuring Quality

DT-2100 Contact/Non-Contact Tachometer - USB Output

The Series DT-2100 Data-Logging Tachometer is the most highly advanced tachometer ever developed by Nidec-SHIMPO.

Providing an unequalled level of user flexibility, the DT-2100 is the premium tachometer for engineers and maintenance professionals. Aiding the diagnosis of the most difficult machinery measurements with its on-board data-logging, graphing and statistical analysis, the user can examine the results of their testing on site and determine if additional data is required. Data can be downloaded to the optional software to further analyze and diagnose system performance.

If simplicity is required, the DT-2100 can accommodate with its selectable display styles allowing results to be viewed in standard numerical, chart, bar graph or gauge modes. Max., Min. and Ave. can be quickly scrolled through in any display mode for additional test feedback. Data recording can be set for single point or continuous logging. Often the user may need to adjust the machinery during testing. Simply mount the DT-2100 on its tri-pod connection, select continuous logging and adjust machinery as necessary. After the test, you can easily review results on unit or download to the computer. Two people are no longer required to perform a test that one can now conveniently complete. The DT-2100 even allows multiple users to store their programmed settings. There is no need to spend time checking all settings to ensure proper performance.

The DT-2100 Tachometer is 2 units in 1 with the included 6" circumference contact adapter utilized in linear rate measurement. Most impressive, the DT-2100 provides convenient switching between non-contact and contact operation with its auto-detect function that instantly recognizes if contact adapter is installed. If the larger 12" circumference wheel is desired for detecting finer resolution at higher speeds, simply select in the menu the appropriate wheel and the DT-2100 will properly calculate the sensed speeds.

The DT-2100 possesses many cutting-edge features. One feature that is unique to this instrument is the ability to calculate lengths remotely in non-contact laser operation. This feature adds a level of convenience and capability as often it is dangerous or not pos-



sible to take a reading by physical contact. Another very beneficial feature that will alleviate user adjusted calculations after the test is the DT-2100's scaling function. This will benefit those that need a manual override of the data for any of a number of application specific requirements. Whether the scaling makes the values more logical to the user or if there is an impossibility to measure at a desired specific point, but another point of a different scale provides measurement access, this feature produces the desired calculated reading. Another common example where the scaling function is very applicable is when measuring product length where every set amount of distance there is a non-product gap that should be eliminated from the total. The scaling feature factors this gap out to provide the accurate total length at the end of the test. The user can factor this gap out and come up with the accurate length at the end.

PC software for the DT-2100 is available separately. The software provides the user the ability to program the tachometer to their requirements, as well as enables more refined analysis of the data.

Features

- Data storage in selected groups allows testing of multiple machinery without mixing data
- View data and statistics on display or utilize optional software for additional analysis on a PC
- Max., Min., Ave., standard deviation & number of recordings as well as acceleration are calculated and reviewable
- Bright, graphical LED rotatable display with multiple display modes provides testing flexibility in any application indoor or outdoor setting
- Compact and light weight for comfortable handheld testing, or for extended tests mount with threaded insert to tri-pod or machinery fixture.
- Auto-detect feature instantly identifies if contact adapter is installed, allows rapid changing from contact to non-contact testing.
- Comparator setting enables upper/lower limit threshold icon indicators to appear; provides immediate pass/fail analysis
- Length (distance) measurement function in non-contact mode allows length measuring in applications where making contact with the machinery is difficult and/or dangerous
- Scale adjustment provides ability to override the data in situations where known offsets are required or multiples make more sense to the user.

DT-2100 Specifications

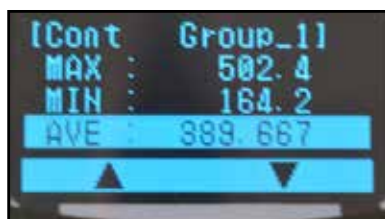
Range	6-99,999 rpm Non-contact 0.8-25,000 rpm Contact
Accuracy	±0.006% of reading ±1 least significant digit
Measuring Units	Speed: rpm, m/min., cm/min., inch/min., ft/min., yds/min., rps, m/sec, cm/sec, inch/sec, km/hr, mph Distance: cm, m, km, in, ft, yd
Memory	Continuous Mode: 1000 Single Mode: 100 Statistics Mode: 100
Measuring Distance	2" to 13.1' (50 to 4,000 mm)
Display	Graphical Blue Light OLED, reversible
Display Update Time	100 ms, 500 ms, 1 sec, 5 sec
Power Requirement	2 AA 1.5V batteries or USB
Battery Life	Approx: 20 hours with brightness set to 20%
Temperature Limits	32° - 113°F (0° - 45°C) Non-Condensing
Construction	Polycarbonate
Dimensions	6.1" x 2.2" x 1.4" (155 x 55 x 35 mm)
Product Weight	5.6 oz (159 g)
Package Weight	1.25 lb (567 g)
Approvals	CE, RoHs
Warranty	2-Year
Included Accessories	2 cone adapters, funnel adapter, 3½" extension shaft, carrying case, master wheel (6" cir.), 2 AA batteries, contact adapter

Ordering Details

DT-2100	Data-Logging, Contact, Non-Contact Laser Tachometer with USB Output, 6" cir. wheel
DT-2100-OP-PCS	PC Software for DT-2100 Tachometer with USB Cable
NIST-TACH	NIST traceable certificate with data

Accessories

DT-2100-OP-CAS	Replacement Contact Adapter for DT-2100 Tachometer
CONE	1/2 inch cone adapter
CONE-3/4	3/4 inch cone adapter
CONE-1-1/4	1-1/4 inch cone adapter
EXT-SHAFT	3.5 inch extension shaft for handheld tachometers
FPM-12	12 inch circumference measuring wheel
FPM-6	6 inch circumference measuring wheel
FPM-6-GV	6 inch circumference grooved measuring wheel
FUNNEL	1/2 inch funnel adapter
FUNNEL-3/4	3/4 inch funnel adapter
TAB	Sheet of thirty five 1/2 inch square reflective tabs
TAPE	1" x 7.75" strip of reflective tape



View of Captured Statistics



View of Graph Mode



DT-2100 Shown with Contact Adapter & Cone

SHIMPO INSTRUMENTS

Measuring Quality

MT-200 Combination Contact/ Non-Contact Pocket Tachometer

The MT-200 Combination Contact/Non-Contact Pocket Tachometer with microprocessor technology possesses the precision of the standard Shimpo Tachometer line, yet within a compact, pocket-style enclosure. These battery-operated tachometers feature the same rugged, high quality components that have made Shimpo tachometers the benchmark in the industry. The MT-200 provides users with the capabilities of measuring and recording speeds of rotational, linear and surface plus total length in both contact or non-contact modes. The user-friendly, value-packed units feature memory storage; quick selection unit's button; length functions; retrieval of last, maximum and minimum values; plus each unit comes standard with a free N.I.S.T. calibration certificate. Each unit ships in a protective carrying case which includes a cone adapter, funnel adapter and 6" circumference wheel.



Features

- Multiple measurement types in both contact or non-contact modes: total revolutions (rev); revolutions per minute (rpm); surface speed: m/min, y/min, ft/min, in/min; and length: meters, yards, feet and inches.
- Non-contact measurements up to 23.6" (60 cm) away.
- Compact, pocket-size design fits easily in the palm of the hand.
- Memory automatically stores minimum, maximum, and last reading. Plus, 10 user stored readings can be logged and their average will be provided.
- Long battery-life enables continuous operation.
- Instant conversion of units.
- Low battery and over range indication.
- NIST calibration certificate included with every unit.



MT-200 Shown in
Carrying Case

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MT-200 Specifications

Display Range	RPM Non-Contact: 6.0 - 99,999 RPM Contact: 6.0 - 25,000 RPM Revolutions (total) Non-Contact & Contact: 1 - 99,999 Speed Using 6" Cir. Wheel: meters/min: 0.1 - 3,809.8; yards/min: 1.0 - 4,166.4; inch/min: 36 - 99,999; feet/min: 3.0 - 12,499 Length Using 6" Cir. Wheel: meters: 0.2 - 99,999; yards: 0.2 - 99,999; feet: 0.5 - 99,999
Accuracy	Revolution: 6.0 - 599.9 rpm: ± 1 rpm ; 600 - 99,999 rpm: $\pm 0.006\%$ of reading ± 0.5 digit Surface Speed, Length: $\pm 0.4\%$ of reading ± 1 digit
Display	5 digit 0.47" (12 mm) high LCD
Memory System	Readings are stored in memory and retained for 5 minutes (last, max., min., and 10 user logged measurements with corresponding average)
Detection	Laser diode
Update Time	1 second (typical)
Over Range Indicator	Flashing numerals
Power Requirement	3 AA 1.5V batteries
Operating Temperature	32° - 113°F (0° - 45°C)
Construction	ABS Resin housing
Product Weight	0.35 lb (160 g) 0.46 lb (210 g) With contact adapter installed
Package Weight	0.85 lb (386 g)
Dimensions	Main unit: 4.55"L x 2.52"W x 1.24"H (115.5 mm x 64 mm x 31.5 mm) Overall Length with contact adapter: 5.9" (149 mm)
Warranty	2-Year
Included Accessories	Three AA Batteries, cone adapter, funnel adapter, contact adapter, master wheel (6" cir.), reflective tape, carrying case, NIST certificate

Ordering Details

MT-200	Contact/Non-Contact, Pocket Tachometer with included contact adapter, 6" circumference contact wheel and NIST calibration certificate.
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DISTRIBUTED BY:



LASER TACHOMETER

PLT-5000

Measuring Range

6.0 – 99,999 RPM

The PLT-5000 Pocket Laser Tachometer accurately measures RPM and Surface Speed using contact or non-contact measurement techniques. This battery-powered unit is extremely compact for convenient portable use and is supplied in a rugged and attractive plastic housing that is ergonomically designed for optimum comfort.

When measuring RPM in the non-contact measuring mode, the PLT-5000 emits a precision laser beam that is aimed at a small piece of reflective tape, which is affixed to the rotating target.

The PLT-5000 is extremely easy to operate and quickly converts from non-contact operation to contact operation by screwing the contact adapter in place. In addition to RPM's, a wide variety of engineering units for surface speed and length are user-selected via the front panel buttons. Units include; feet per minute, meters/min, yards per minute, inches per minute and more.

A built-in memory stores up to 10 measurements plus minimum, maximum, average and last.

FEATURES

- FREE NIST-traceable calibration certificate
- Sharp Visible Laser Beam
- Up to 60" Range
- Measures RPM and surface speed and length
- 14 memories
- Displays in Metric or English Readings
- One year warranty
- Simple One Button Operation



PLT-5000 Complete Kit

The PLT-5000 comes with storage case, 6" circumference wheel, Funnel Adapter, Cone Adapter, Contact Adapter, three AA batteries, reflective tape, NIST certificate and instruction manual.



Data & Specifications

Display	5 digit 0.47" (12mm) height LCD
RPM Measuring Range	Contact: 6.0-20,000 RPM (limited for safety reasons) Non-Contact: 6.0-99,000 RPM
Surface speed 6" Wheel	(m/min) 1.0-3,810, (yards/min) 1.0-4,166.4 (inch/min) 36-99,999 (feet/min) 3.0-12,499
Length (Using 6" wheel)	(M) 0.2-99,999-(yards) 0.2-99,999 -(feet) 0.5-99,999
Total RPM	1-99,999
Accuracy	Revolution 6.0-599.9 rpm \pm 1rpm, 600-99,999 rpm: \pm 0.006% & \pm 0.5 digit
Surface speed, length	0.4% and \pm 1 digit
Memory function	14 Reading are stored in memory and retained for five minutes (Last, Max, Min, average, and 10 selectable measurements.)
Update time	One Second
Detection	Laser Diode
Auto Power Off	5 Minutes
Batteries Included	3 AA 1.5V
Low Battery Indicator	Flashing "LO BAT" in display
Over Range Indicator	Flashing "OVR" display
Operating Temperature	32-111°F (0-45 °C)
Case Construction	ABS Resin
Dimensions	4.55" L x 2.52" W x1.24"H (115.5 mm x 64 mm x 3.15 mm) Length with contact adaptor: 149 mm
Weight	6 ounces (160 g)
Accessories	Storage Case, Cone Adapter, Funnel Adapter, Master Wheel (6"), Contact adaptor, 3 AA batteries, 25 reflective tapes, NIST Certificate, Instructions

All specifications subject to change without notice.

Item	Price	Description
PLT-5000	\$ 269.00	PLT-5000 Complete Kit
DTCA	\$ 10.00	Spare cone tip for PLT-5000
DTFA	\$ 10.00	Spare funnel tip for PLT-5000
DTSX	\$ 15.00	Shaft Extension for PLT-5000
205T	\$ 5.00	Reflective Tape (1" x 7") for PLT-5000
205TS	\$ 5.00	Reflective Tab Sheet (35 1/2" x 1/2") for PLT-5000

DT-200LR Combination Laser Tachometers

Series DT-200LR Combination Contact/Non-Contact Laser Tachometers Laser-enabled precise RPM measurement up to 20 feet. The Series DT-200LR digital tachometers incorporate laser technology yet retain our hallmark rugged construction and reliable quality components. Units offer incredible value and versatility as they can operate in non-contact and contact applications. These instruments feature a field-upgradeable contact adapter for linear rate measure, conveniently allowing both non-contact and contact measurements. Incorporating the precise laser technology and user-friendly functions as the DT-200LR tachometer, the DT-200LR-S12 provides an exceptional accuracy in measuring speed and length via its 12" wheel. The larger wheel rotates more slowly than a standard 6" wheel, enabling reliable and safe registration of high speeds.

All Series 200LR units come standard with a NIST traceable calibration certificate. We're confident you'll agree that these fine units are the most advanced handheld tachometers on the market!



DT-205LR

DT-207LR

Features

- Outstanding Accuracy allows usage in the strictest applications
- Sophisticated laser beam detection to 20 feet provides operator safety during testing
- Exceptionally rugged die-cast aluminum housing enables usage in the harshest conditions
- Wide field selection of units in both instantaneous rate as well as totalized length satisfies a multitude of user requirements
- Large 5 digit display aids user visibility
- 10 measurement memory capacity allows quick retrieval of stored data plus additional last, max. & min. values
- Long-life battery (25-40 hrs. continuous use) eliminates concerns of being down during testing
- Compact, Ergonomic design allows easy ergonomic grip
- Rear Threaded Inserts provides option to mount to stand or other device
- Available display options of either LCD or vibrant, bright red LED
- CE Mark combined with free NIST certificate provides a guarantee of quality performance



DT-207LR (LED)
Tachometer
Inspection
Application



DT-207LR-S12
Contact Tachometer
with Optional 12" Circle Wheel



Standard DT-200LR
in Supplied Case

DT-200LR Specifications

Display Range	6 - 99,999 rpm
Accuracy	±1 rpm: 6 -8,300 rpm; ±2 rpm: 8,300 - 25,000 rpm; ±0.006% of reading ±1 digit (±6 rpm max.) 25,000 - 99,999 rpm
Display	5 digit 0.4" (10 mm) high LED
Measuring Units	rpm (on contact using adapter, included) for YPM, mPM, FPM, IPM, and Length: YRD, m, FT and IN Use wheel with 200L adapter
Measuring Distance	1" (25.4mm) to 20' (6m)
Memory System	13 readings are stored in memory and retained for 5 minutes (last, max., min., and 10 extra measurements)
Detection	Laser diode / contact
Update Time	1 second (typical)
Power Requirement	2 AA 1.5V batteries (Life: Approx. 25 hrs)
Operating Temperature	32° - 113°F (0° - 45°C)
Construction	Die-cast aluminum housing
Product Weight	0.8 lb (365 g)
Package Weight	Approx. 2 lb (.91 kg)
Approvals	CE
Dimensions	6.6" L x 2.4" W x 1.8"H (167.5 mm x 60 mm x 46 mm) with contact adapter: Length=8.25" (209 mm)
Warranty	2-Year
Included Accessories	Reflective tape, 2 cone adapters, funnel adapter, 3½" extension shaft, carrying case, NIST certificate, master wheel (6" cir.) & contact adapter
Options	-S12 Option: Same as DT-200LR except 6" circumference wheel replaced with 12" circumference contact wheel

Included Accessories



Ordering Details

DT-205LR	Combination LCD Tachometer with laser sensor and contact adapter for use with included 6" contact wheel. Includes NIST certificate.
DT-205LR-S12	Combination LCD Tachometer with laser sensor and contact adapter for use with included 12" contact wheel. Includes NIST certificate.
DT-207LR	Combination LED Tachometer with laser sensor and contact adapter for use with included 6" contact wheel. Includes NIST certificate.
DT-207LR-S12	Combination LED Tachometer with laser sensor and contact adapter for use with included 12" contact wheel. Includes NIST certificate.

Accessories

CONE	1/2 inch cone adapter
CONE-3/4	3/4 inch cone adapter
CONE-1-1/4	1-1/4 inch cone adapter
DT-ADP-200LR	Contact adapter for DT-200LR
DT-CARRY100	Carrying case for handheld tachometers
EXT-SHAFT	3.5 inch extension shaft for handheld tachometers
FPM-12	12 inch circumference measuring wheel
FPM-6	6 inch circumference measuring wheel
FPM-6-GV	6 inch circumference grooved measuring wheel
FUNNEL	1/2 inch funnel adapter
TAB	Sheet of thirty five 1/2 inch square reflective tabs
TAPE	1" x 7.75" strip of reflective tape
NIST-TACH	NIST traceable certificate with data

Optional Accessories



FPM-12 (11/min) 12" circle



FPM-6-GV (6" circle grooved wheel)

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