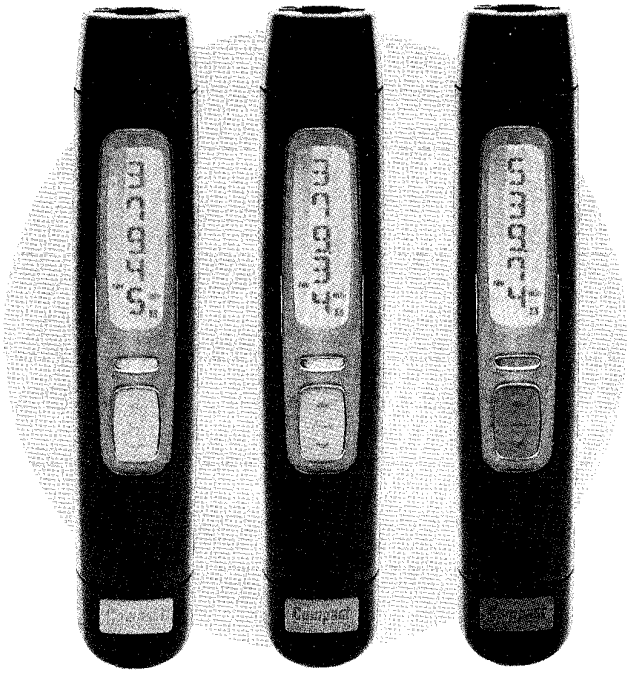


A2101 A2102 A2103

Model - A2101

Economy model Optical Tachometer

Where ease of use and economy are paramount, the A2101 is the ideal tool for the Service and commissioning Engineer, fulfiling non-contact optical speed measurement needs in industrial applications such as electric, pneumatic and hydraulic motors, pumps, compressors and similar rotating machinery.

This model features a general speed range from 60 -19,999 rpm and an optical range up to 0.5 Metres (1.5 feet) from reflective target.

This model has a non-inverting display.

Model A2102

A general purpose Optical/Contact Tachometer Kit

The extra features of the A2102 caters for wider applications, with greater versatility giving more flexibility in use, with the ability to measure rpm optically and by contact method, rpm and linear speeds in metres per minute, our unique "Invertor" display feature is also included on this model.

The A2102 model has a wide speed range of 3 - 99,999 rpm, making it ideal for many industrial machinery applications, such as conveyors, textiles, paper, plastic and wire speeds, through the benefit of contact rpm and linear speeds of 0.3 - 1500.0 metres/min, can be measured, this model has autoranging as standard with a maximum resolution of 0.01 units, last reading hold memory is also standard.

Model A2102/LSR

General purpose Laser Optical/Contact Tachometer Kit

Close-up

A2102/LSR shown with Contact Adaptor fitted

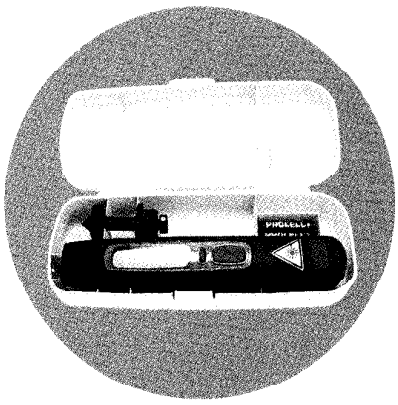
The A2102/LSR is the perfect tool for the more difficult access applications, with all the features of the standard A2102, this enhanced version has outstanding optical features, employing a high visibility red spot laser beam system to give superior performance and a range of up to 2 metres (+6ft), it is excellent for small high speed shaft speeds and high daylight applications.

Model A2103

Professional Optical/Contact Tachometer Kit

An extremely versatile fully featured model, with many more functions and even greater flexibility, this model has a wide selection of practical functions including revs per minute (rpm) and revs per second (rps) both optically and by contact method, contact linear speeds in feet, yards or metres per minute & per second.

Special memory functions include, Maximum, Minimum readings capture, employing a unique dual timebase for high speed data grabbing, True average speed measurement mode is also standard, with Time Interval measurement for reciprocal speeds and Cycle Timing, other features include Revolution Count and Length Count in metres, yards or feet, with Last Reading Hold and auto-memory retention of last selected function mode.

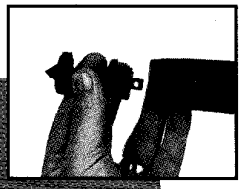


Model A2103/LSR

Professional PLUS - Laser Optical/Contact Tachometer Kit

Featuring unsurpassed measurement Capabilities & Performance

This top of the range model has all the extra high performance features of the standard A2103, PLUS the enhanced Laser optical system, offering superb optical performance, for all applications, with a range of up to 2 metres (6 feet) and excellent high speed operation on small shafts.



Contact Adaptor

All models (except A2101) are supplied with Contact Adaptor, Reflective tape, Batteries, Instructions, 12 months Warranty, Certificate of Calibration and custom moulded Carrycase

Model A2101 is supplied with Reflective Tape, Batteries, Instructions, 12 months Warranty, Certificate of Conformity and is carton packed

UK Design registration No. 2059299
Patents pending PCT No. PCT/GB97/02460 USA No. 08/770.265 UK No. 9619171.3

Designed and Manufactured in the UK

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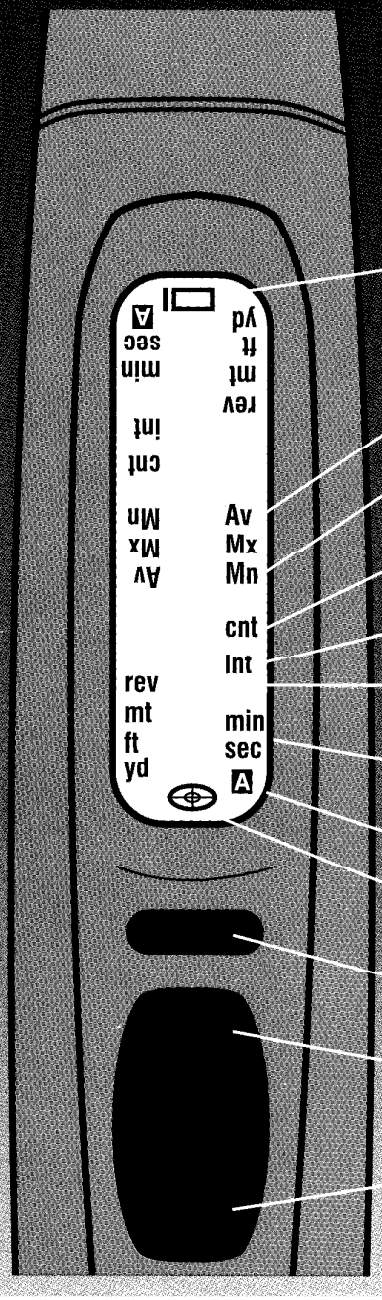
Technical Specification

	VISIBLE LIGHT			LASER	
Features	**Model A2101**	**Model A2102**	**Model A2103**	**Model A2102/LSR**	**Model A2103/LSR**
Display type	All models - 5 digit LCD vertical - All models				
Speed range - revolutions	60-19,999 rpm	3-99,999 rpm	3-99,999 rpm or 0.05-1,666 rps	3-99,999 rpm	3-99,999 rpm or 0.05-1,666 rps
Linear speed mode	No	Metres/min	M/min, Yds/min., Ft/min., M/sec, Yds/sec, Ft/sec	Metres/min	M/min, Yds/min., Ft/min., M/sec, Yds/sec, Ft/sec
Accuracy	All models - 0.01% +/- 1 digit - All models				
Resolution	1 rpm	Max 0.01	0.001 (in Autorange mode)	Max 0.01	0.001 (in Autorange mode)
Autoranging function	Single fixed range	Autoranging only	User selectable	Autoranging only	User selectable
Timebase	0.8 sec or time between pulses whichever is slowest on all models				
Special measurement modes					
Maximum/Minimum rate feature	–	–	Captures highest or lowest speed during a continuous measurement session	–	Captures highest or lowest speed during a continuous measurement session
Fast response timebase	–	–	Auto selected timebase - 0.1 sec in max/min mode	–	Auto selected timebase - 0.1 sec in max/min mode
Average speed mode	–	–	True moving average of last 8 readings	–	True moving average of last 8 readings
Resolution					
Units of measurement	–	–	Revolutions, Metres, Yards, Feet	–	Revolutions, Metres, Yards, Feet
Length mode	–	–	Equivalent to 0.1 Metres in all ranges	–	Equivalent to 0.1 Metres in all ranges
Revolution mode	–	–	1 revolution	–	1 revolution
Time interval mode					
Timing range	–	–	0.01 - 99999 seconds	–	0.01 - 99999 seconds
Resolution	–	–	0.01 maximum - autoranging only	–	0.01 maximum - autoranging only
Memory functions					
Last reading hold mode	NA	Last reading held in display 1 min.			
Function selection modes	NA	NA	Last selected mode retained in memory at power off	NA	Last selected mode retained in memory at power off
Optical systems					
Light source	Minilamp	Minilamp	Minilamp	Red spot Class II laser	Red Spot Class II Laser
Optical range	0.5 metres	1 metre	1 metre	2 metres	2 metres
Optical angle to reflective target	+/- 45 deg	+/- 45 deg	+/- 45 deg.	+/- 80 deg.	+/- 80 deg.
On Target Indicator	In display on all models				
Contact Measurement					
rpm & linear speed adaptor	No	Yes	Yes	Yes	Yes
Controls					
Select Measurement	On/Off	Program options and normal operation selected via pushbuttons			
Inverting function	NA	Via dual pushbuttons for normal & inverted measurement modes			
Selectable functions	None	RPM and Metres/min.	Full menu via program button	RPM and Metres/min.	Full menu via program button
Power source	4 x AAA batteries all models				
Battery low indication	In display on all models				
Battery life	Typical 3 - 6 months on all models				
Custom Carry Case	No - optional	Yes	Yes	Yes	Yes

Model	**Typical use**
A2101	Ideal where non contact rpm and simplicity of operation is required at economic cost
A2102	Specifically designed to suit the regular user needing both contact and non-contact measurements but yet providing practical easy to use features & high specification of rpm & metres/minute measurement
A2102/LSR	As A2102 but with enhanced optical system, giving excellent optical performance in any application where access is difficult or where machines are guarded with protective windows. Very good in high daylight applications
A2103	This model is highly suitable in wide variety of applications where in depth speed measurement data monitoring is essential, extremely versatile, with measurements in minutes or seconds, with rpm and linear parameters, Maximum, Minimum speed capture, and average speed monitoring, most useful in fluctuating speed applications. Ideal for test, development, production monitoring & as a real diagnostic tool.
A2103/LSR	As A2103 but with the added advantages of the Laser optical system to provide the ultimate tool in most speed measurement applications

Advent

Hand Held Tachometers



Unique Vertical "Invertor" LCD display

Slimline design

Two choices of optical system

5 models in the series - one to suit most needs

Optical & Contact speed measurements

Low battery indication

Average speed monitoring

Maximum and Minimum speed capture

Total revolutions and length count mode

Time interval or Cycle time measurement

Measures Revolutions and Linear speeds

Measure in units per minute or seconds

Auto range mode indication

On target indicator

Program select

Press to measure - Normal mode

Press to measure - Inverted mode

Model illustrated is A2103 - Actual features depend on model selected

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