

# STUDENT EXPERIMENT MECHANICAL OSCILLATIONS AND WAVES



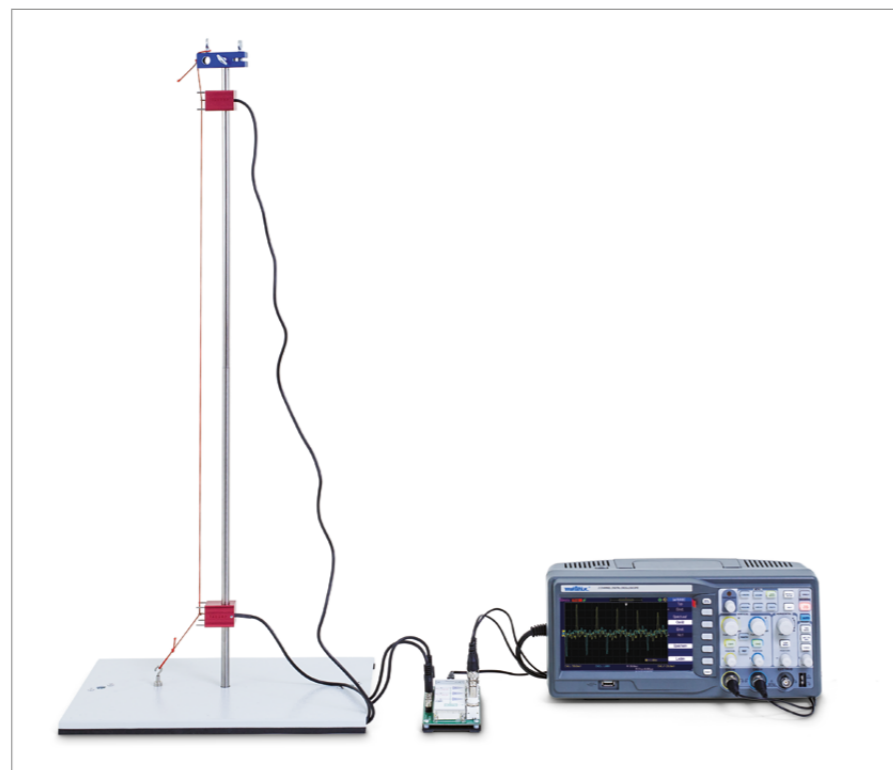
## > CONTENTS:

- 1 MEC Control Unit
- 1 Plug-in Power Supply
- 2 Dynamic Force Sensors
- 1 Eccentric Axle Motor
- 1 Induction Coil
- 1 Stopwatch
- 4 Coil Springs
- 1 Set of 10 Weights, 50 g
- 1 Base Plate
- 1 Cross-strut
- 2 Stand Rods with External Threads
- 2 Stand Rods with External and Internal Threads
- 2 Double Clamps
- 1 Magnetic Hooks
- 1 Bar Magnet
- 1 Rubber Cord
- 1 Roll of Twine
- 1 Thread Eyelet
- 1 Squirrel Cage Ring
- 1 Ruler
- 2 BNC Cable, 1 m
- 1 BNC/4-mm Cable

> CD-ROM CONTAINING ALL DIFFERENT SETS OF INSTRUCTIONS IS INCLUDED!

Large equipment set for carrying out 23 fundamental experiments on the properties of mechanical oscillations and waves. Stored in a tough Gragnell tray with foam inlay featuring recesses moulded to the shape of the apparatus and covered by a transparent lid. Includes CD with experiment instructions.

SEK Mechanical Oscillations and Waves (230 V, 50/60 Hz) 1016652  
SEK Mechanical Oscillations and Waves (115 V, 50/60 Hz) 1018476



Reflection of waves along a rope

## INCLUDES INSTRUCTION FOR 23 EXPERIMENTS ON MECHANICAL OSCILLATIONS AND WAVES:

- Determining spring constants (2x)
- Oscillations of a spring pendulum \*
- Oscillations of two "identical" spring pendulums \* / \*\*
- In-phase and 180° out-of-phase oscillations of two "identical" spring pendulums \* / \*\*
- Excitation of a motionless spring pendulum by a moving one \* / \*\*
- Superposition of the oscillations of two spring pendulums \* / \*\*
- Spring pendulums connected in line \* / \*\*
- Spring pendulums connected parallel to one another \* / \*\*
- Intrinsic oscillation of a spring pendulum \*
- Types of oscillation for a coil spring pendulum \*
- String pendulums (2x)
- Seconds pendulums
- Galileo's interrupted pendulum
- Damped oscillations of string pendulums (2x) \*
- Standing waves along a rope (2x) \*
- Reflection of waves along a rope \*
- Speed of propagation of waves along a rope (2x) \*
- Oscillation of strings \*

Equipment Mechanical Oscillations and Waves:

1016652 SEK Mechanical Oscillations and Waves (230 V, 50/60 Hz)

or

1018476 SEK Mechanical Oscillations and Waves (115 V, 50/60 Hz)

Dual-channel Oscilloscope, e.g.

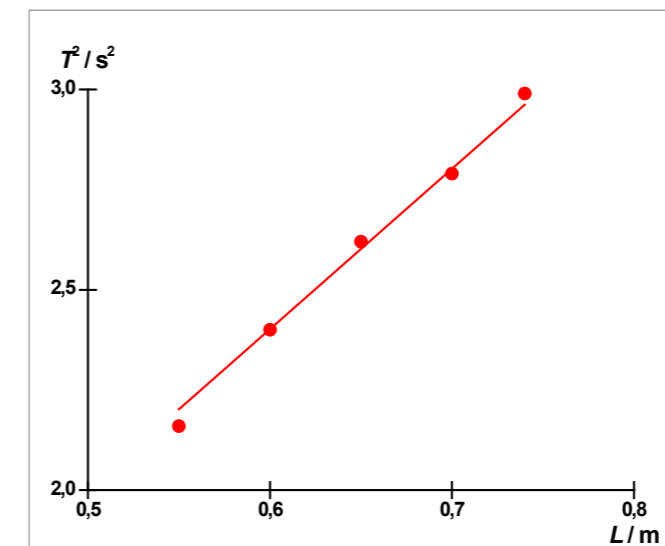
1020910 Digital Oscilloscope 2x30 MHz

(for experiments marked \*)

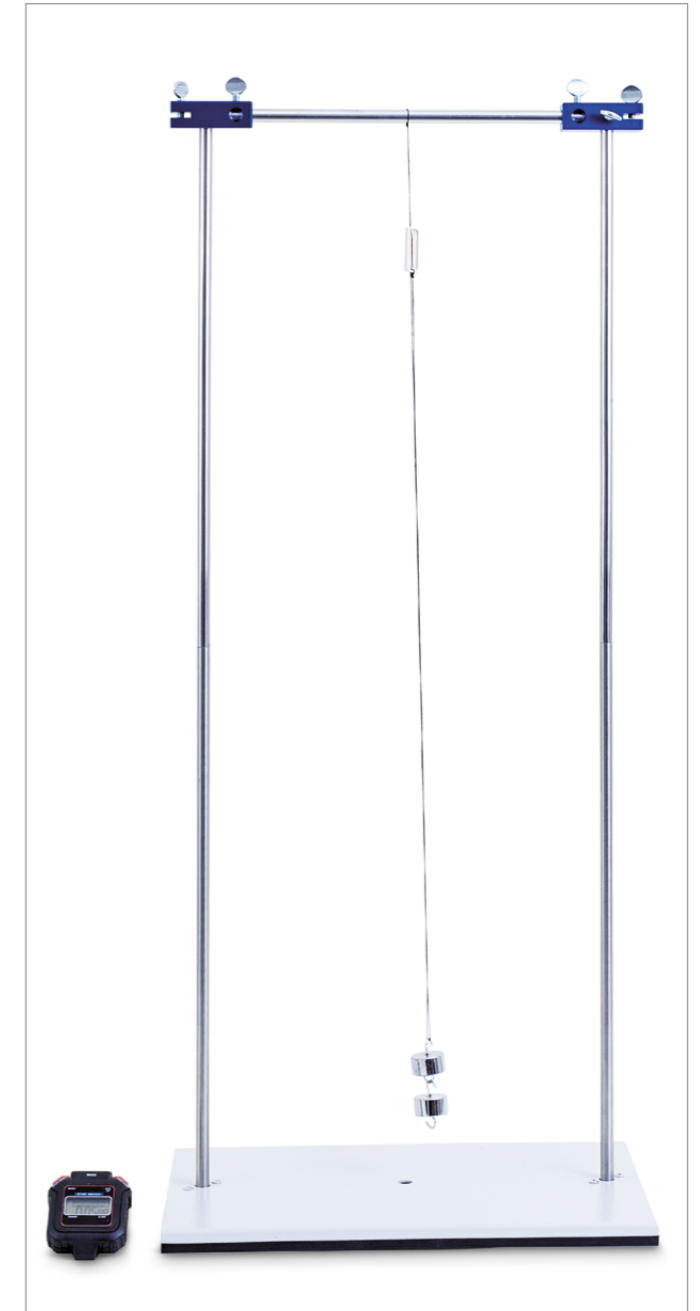
1013526 Analog Multimeter ESCOLA 30

(for experiments marked \*\*)

PLEASE ASK FOR QUANTITY DISCOUNTS  
ON CLASS SETS OF 8 PIECES OR MORE.



Squares of the period as a function of the length of the pendulum



String pendulum