



Bio Instruments S.R.L.

**PHYTO-SENSORS™
SERIES**

SA-1250z Auxanometer



Introduction

The SA-1250z Auxanometer is designed to measure the growth increment and growth rate of a tree.

The Auxanometer is based on a draw-thread displacement transducer. The output value of the Auxanometer represents amount of the thread pulled out of the device. The thread is a plastic coated stretch-resistant cord tensioned by an internal spring pack. A thread begins with a ring for connecting an extension wire (thread, cord, or clip) provided by a user. A thread outlet is located at the bottom side of the housing. The Auxanometer comes in a couple connected weatherproof boxes. The lower box contains the displacement transducer. The upper box includes a signal conditioner, 2.4 GHz transceiver, and the battery compartment.

Power

The ATH-3z is powered by 3 AA Alkaline batteries. The batteries are not included. Open the upper box with the screw driver, and insert three batteries keeping the right polarity.

Installation

The Auxanometer shall be attached with screws somewhere above the plant under study. Then, pull out the thread and attach it with any means to the measured point of the plant. As the plant grows in height, the amount of outside thread decreases. The length of the pulled thread is transmitted to the PM-11z Phytomonitor via radio channel.

Attention! Do not let the thread draw in back sharply. This may result in permanent damage of the displacement transducer. If necessary, let the thread to draw in back very slowly.

Also, prevent overrange.

Please note that both such cases will be considered as a customer induced damage.

Readings

The SA-1250z communicates over the radio 2.4 GHz channel with a network data logging unit. Activation of the sensor and measurement settings are described in the Quick Start Guide of the data logging unit (PM-11z Phytomonitor or PC Phyto-Logger).

Specifications

Measurement range:	0 to 1220 mm
Power supply:	3 AA Alkaline batteries
Operating temperature:	0 to 50 °C
Extension/retraction force:	150 g typ. (200 g max.)
Protection index:	IP53

Customer Support

If you ever need assistance with your equipment, or if you just have questions or feedback, please e-mail at support@phyto-sensor.com. Please include as part of your message your name, address, phone, and fax number along with a description of your problem.



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