



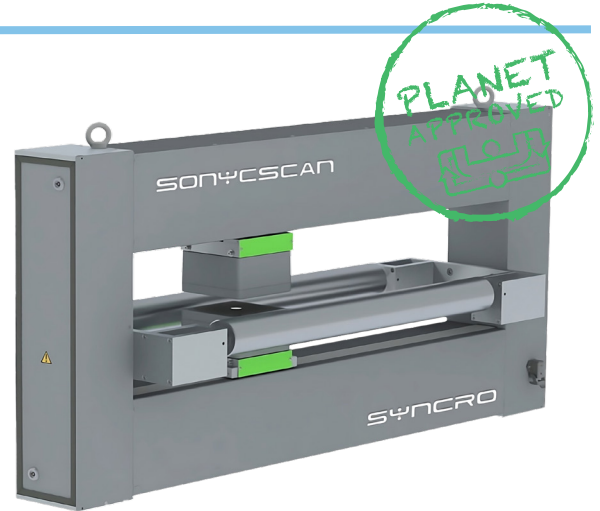
# SONYCSCAN

## Ultrasonic Gauging System

**SONYCSCAN** is based on the ultrasonic absorption measurement principle to measure the weight, usually shown in g/m<sup>2</sup>.

### OPERATING PRINCIPLE

SonYcscan sensor uses ultrasonic wave technology, that overcomes the limitation of other electromagnetic (radioisotope or X-ray) measuring devices. Using a series of special software procedures that measure the material's wave characteristic absorption and compensating the measurements for thermal drifts and local humidity variations, the system is able to detect the thickness/weight of the material without needing specific calibration.



### MAIN FEATURES

#### ACCURACY

Accuracy less than 0.3% of the measured value, with resolution 0.02 micron.

#### NON RADIOACTIVE

SonYcscan doesn't use any type of ionizing radiation and therefore doesn't require any radiation protection measures against damage to the health of operators, nor any special precautions, procedures, checks and medical examinations to protect the health of the operators and the general public typical of radioactive sources.

#### PROCESSES

SonYcscan can be used on different process such as stretch film lines, non-woven lines, BOPP lines, coating lines.

#### NO CALIBRATION

No calibration required for different materials. Automatic calibration and setup.

#### SYNTROL CONTROL

SonYcscan can be controlled by a SYNTROL supervision system including PC touch screen, keyboard, mouse and printer.

#### AUTO PROFILE CONTROL

As option SonYcscan can be connected to SYntrolgauge to control automatically the thermal bolts used on flat dies or automatic air ring on blow film lines to regulate the film/sheet thickness profile.

#### EASY & FAST INSTALLATION

The average installation time is less than 2h.

#### HEAVY DUTY STRUCTURE

Machine design offers excellent resistance against bending of the main frame and guarantees measurement stability.

#### EASY ACCESS FOR MAINTENANCE

SonYcscan has been designed to guarantee easy access for maintenance operations. Long lifetime, easy to clean, rugged and robust sensor.

#### STABLE AND PRECISE

Extremely stable and precise measurement: down to 0.05% of the measured value repeatability. Internal compensation of the temperature and humidity of the scanning heads and of the measurement gap guarantee the correct measurement in different conditions of use.

#### LIMITLESS PERFORMANCE

SonYcscan calculates the basis weight in real time regardless of material, colour or position and is suitable for paper, metals, plastic, technical fleece, fabrics and many more materials. The spot of measurement is very small.

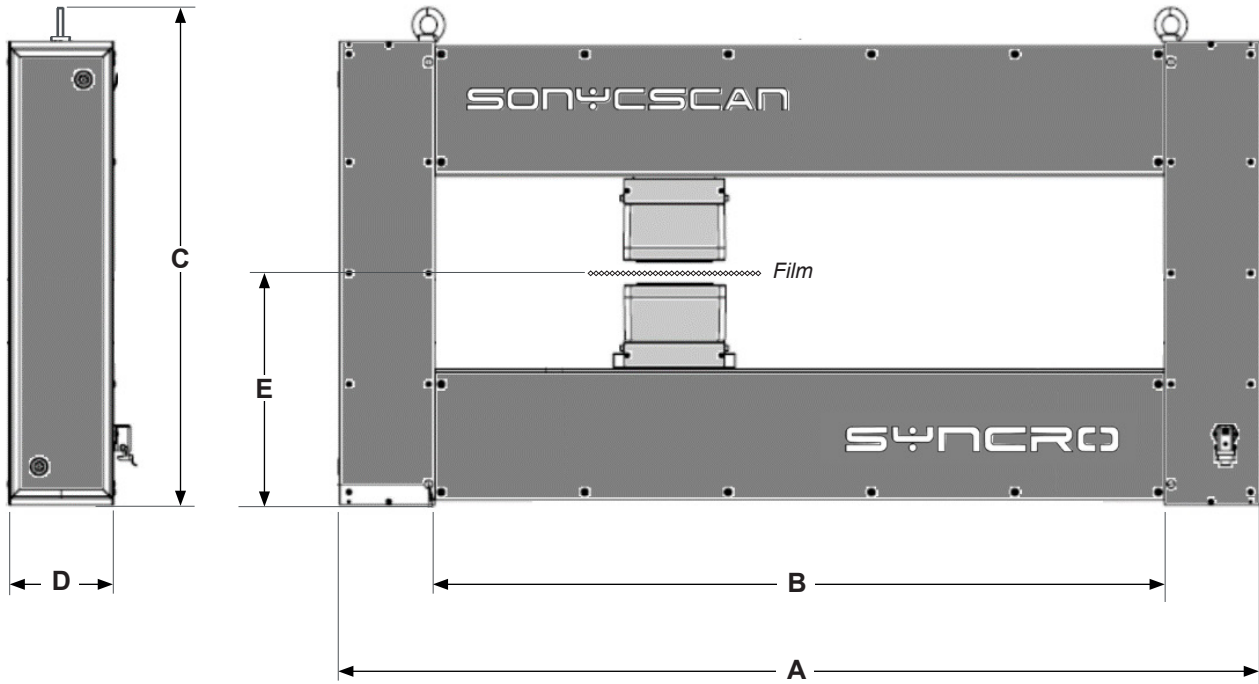
#### SPECIAL VERSION

Available also as laboratory line or unit.

#### INDUSTRY 4.0 & IoT

All Syncro machines are ready to be integrated with third party supervisory controls and ERP systems using the latest generation of OPC-UA protocols as standard.

TECHNICAL DATA



	A	B	C	D	E
<b>Dimension</b>	1110 mm	810 mm	820 mm	165 mm	365 mm
<b>Measurement Range</b>	0 – 1500 g/m <sup>2</sup>				
<b>Measurement speed</b>	200 Hz				
<b>Measurement spot</b>	Ø 5 mm				
<b>Measurement noise</b>	0.05% of the measured value				
<b>Temperature drift</b>	0.1% / °C				
<b>Power supply</b>	100-220VAC / 50-60 Hz				
<b>Pass line error</b>	With displacement less than +/- 5 mm no effect on the measurement				
<b>Weight</b>	50 kg				
<b>Operating temperature</b>	5°C - 45°C (41°F - 113°F)				