

SCIENTA ONLINE BETA SOURCE SENSORS FOR TOTAL WEIGHT MEASUREMENT



- ✓ **Non-contact, double sided online measurement**
- ✓ **Rugged, proven Scienta technology with over 60 years of experience**
- ✓ **Modern, intelligent sensor design using Fieldbus technology**
- ✓ **More accurate online measurements using thermal stabilizing of sensor**



MEASURING METHOD

The sensor measures the ion current caused by the beta particles ionizing the inert gas in the Ion Chamber. This current is digitalized and linearized to correlate to real g/m^2 of measured area weight. The beta sensor can measure weights from as low as 15 g/m^2 up to a maximum of 900 g/m^2 of various materials. This type of weight measuring sensor is very versatile and measures a range of materials very well. Other Beta sources may also be used for other weight ranges.

BENEFITS

to process applications such as paper, board, nonwovens, resin impregnation, laminating, glass fiber etc.

- Modern, intelligent sensor design
- Build-in processor for direct gms calculation
- Non-contact measurement
- Service free construction
- Easy and convenient to install and operate
- Full range of scanners available
- Easy calibration and setup
- More accurate on-line measurements
- Insensitive to web vibration
- Faster on-spec quality and reduced start up waste
- Reduction in rejects due to high performing measurements
- Minimization of energy consumption by accurate and reliable Moisture and Basis Weight measurements and controls
- Machine speeds can be increased on drying limited pulp and paper machines

TECHNICAL SPECIFICATIONS

Sensor Type	7210	7211
Construction	Double sided	Double sided
Radiation source	Kr-85, 11 GBq	Sr-90, 1.9 GBq
Range	15 – 900 gms	200 – 3000 gms
Accuracy	0,25 g/m^2 (2 σ)	2 g/m^2 (2 σ)
Repeatability	0,2 g/m^2 (2 σ)	1 g/m^2 (2 σ)
Recommended measurement gap	13 mm	13 - 20 mm
Power requirement	+24V, 1A	+24V, 1A
Installation	Scanning/Fixed	Scanning/Fixed

Sensor Type	7210	7211
Temperature compensation	Yes	Yes
Interface Options	Profibus	Profibus
	Modbus	Modbus
	Ethernet	Ethernet
	USB	USB
	2 x analog	2 x analog
Environmental conditions	10-60 °C 10-95 % RH	10-60 °C 10-95 % RH
Liquid Cooling	Option	Option