

## WMR-9

### basis weight measurement and control

- extremely accurate
- excellent streak resolution
- cross profile control



**METHODE :** Continuous measurement of basis weight (gr/m<sup>2</sup>) relies on radiation absorption of beta- or gamma rays while passing through the web. The head transmitter which contains a radio isotope sends a beam of certain intensity which is received and evaluated by the head receiver. The intensity loss is in proportion to the web mass.

The measurement heads are insensitive to material composition and exploit advanced technology features which assure a very high speed response combined with high resolution measurement.

Depending on application the heads are equipped with different radio-isotope sources such as Pm-147, Kr-85, Sr-90, Am241 and other covering a very wide range of basis weights and materials.

The ruggedized heads are developed in respect to excellent geometry making them insensitive to mechanical deflections or pass line variations, incorporate precise temperature compensation and the receiver ionization chamber with the electronics minimize noise and increase the signal-to-noise ratio. The excellent linear characteristic of the heads allow a fast and simple one point calibration.

**APPLICATIONS:** Pulp-, Paper-, Cardboards-, Wood-, Mineral-Industries, textiles, plastic-foils, metal-strips.

**COMPONENT PARTS:** The system consists of two heads (transmitter and receiver) or one combined operating in transmission or reflection mode.

The heads can be integrated in META-9000 distributed control system, incorporated in another supervision system or connected to the electronic amplifier for panel or stand alone operation with LED-display.

### **TECHNICAL SPECIFICATIONS:**

**Dimensions:** (h<sub>x</sub>w<sub>x</sub>d) [ mm]

heads :195x185x343.

electronic amplifier: 135x280x250

**weight** (head) : approx. 12 kg

**Measuring range** : 0 – 35 [kg/m<sup>2</sup>]

**Uncertainty** : Reproducibility on 1 sec basis Correlativity to lab):

$2\sigma = \pm 0.2\%$  of measured value

**Outputs** : 0-10 V / 4-20 mA

**Power Supply:** 230 VAC, 50/60 Hz

**Protection Class:** Sensor IP65

Electronic transmitter IP54 (front)

**Environmental Conditions:**

Sensor: 50 oC.(no cooling)

Transmitter : 35 oC , 0-95%r.H.