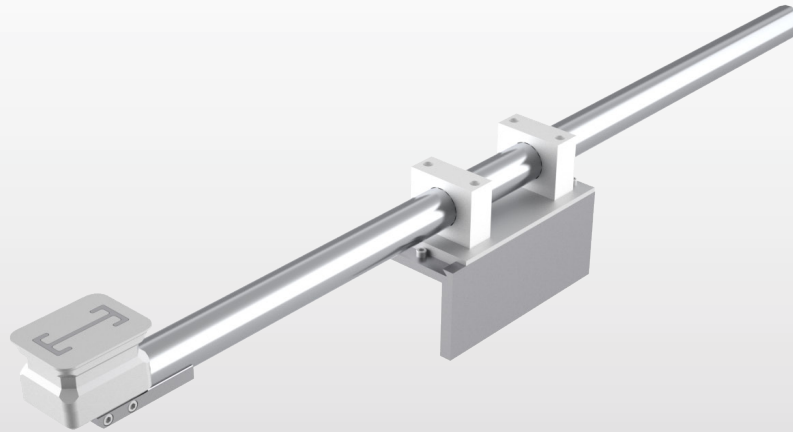


AMS

Active Microwave Sensors



P1

P1 | Planar microwave sensor to measure water content in the forming board section.

INCREASING
QUALITY

1

IMPROVING
EFFICIENCY

2

MAXIMIZING
RUNNABILITY

3

Quality – Efficiency - Runnability

The P1 sensor has been optimized for the use in pulp & paper production process.

A big number of factors could influence drainage characteristics and the knowledge of consistency and water content in several section of the forming fabric can be a key factor in order to achieve the best trade off.

AMS P1 sensor allows to measure the water level in every point in the forming section, thanks to its exceptionally large measurement range and to its small dimensions.

Unique patented technology

The P1 uses a unique patented technology called Planar Active Microwave Sensor.

This technology is based on a planar microwave resonator and makes this instrument able to measure up to 48000 g/mq. The measure is not affected by the type of fibers, color of paper and vibrations.

The proprietary algorithm makes P1 also independent from temperature, conductivity and oscillations of the fabric.

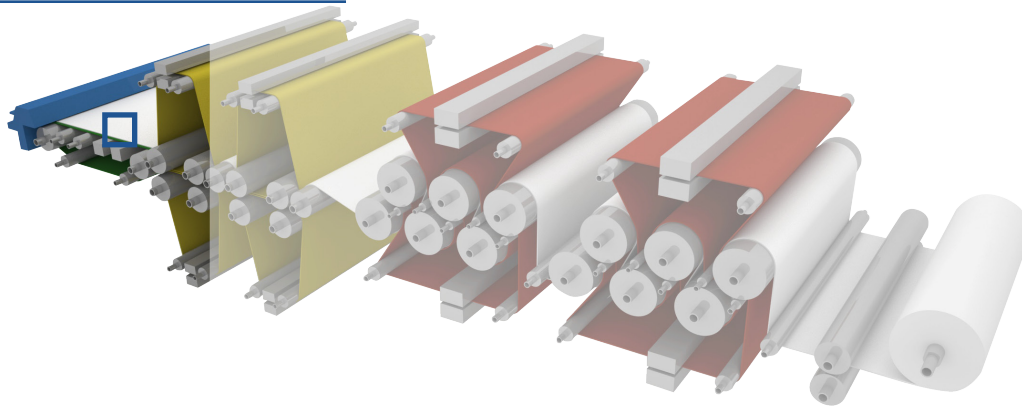
On the other hand, using the specific software suite on the AMS HUB, and switching the sensor in "FFT" mode, the sample rate is increased to 1024 sample/sec and it is possible to extract relevant information about vibration and oscillation on the wire.



Main Features

- Wide measurement range from 0 to 48.000 g/m2
- Resolution of 1 g/m2
- High repeatability and reliability
- High speed measurement rate up to 1024 Sample/s
- Easy installation (single cable connection)
- Easy Integration in complex AMS standard measuring system.
- Simple DCS/QCS interfacing with via analog output
- Advanced data processing feature with FFT analysis tools

FORMIN BOARD



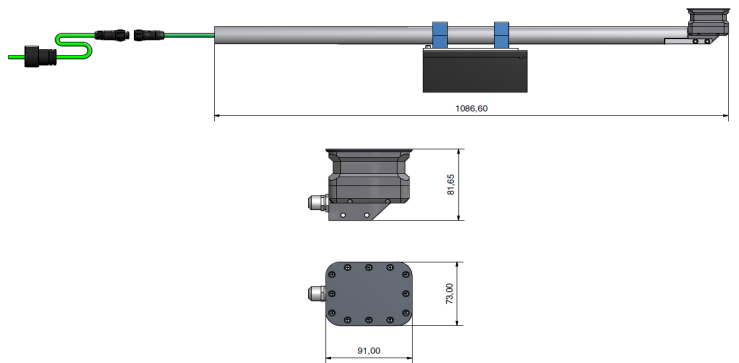
P1

Flexible positioning

The P1 can be used in every section under the forming board, in every kind of forming board from those used in the Pulp mills to that used in the fast newspaper mills, from close the head box to the couch roll.

The sensor has a stainless steel AISI 316 body, that protects it against chemical and mechanical stresses.

P1 uses a single industrial connector carrying all necessary signals and power supplies, directly connected to AMS HUB, with an UTP cable with length up to 100m.



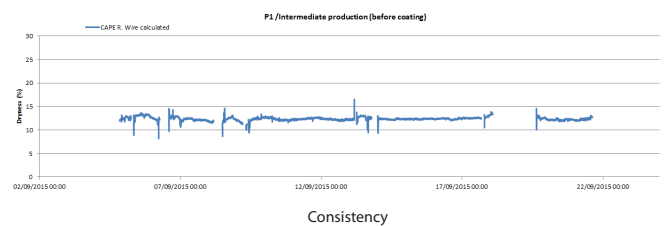
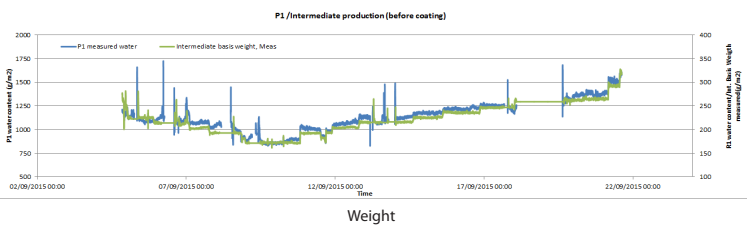
Data analysis with the AMS manager

The PAMS P1 sensor has been optimized for the use in pulp & paper production process. It is designed to measure on line the water content in the forming section allowing a real time control of consistency and other production parameters.

The sensor works in contact with the forming wire and produce digital data. AMS P1 sensor needs to be connected to the AMS HUB by a digital data connection.

It can be completely integrated in every AMS measuring System. By using the HUB analog output can be easily connected to the DCS/QCS (using an analog interface).

Moreover if an internet connection is provided the data generated can be analyzed in real time by any remote allowed user.



Technical specifications

Measurement specifications

Water content measurement range *g/m² 0 to 48.000*
 Resolution *g/m² 10*
 Sample rate *Sample/sec 40 max*




Environmental

Operating temperature *°C 10-80*
 Protection grade *IP 67*

Mechanical Specificatio /R1 Sensor

Weight *Kg 1,8*
 Dimension (sensor head) *mm 91x 80 x 73*
 Dimension (body material) *mm 222x 85 x 150*

Accessories

-  7m male soriau pigtail
-  AISI 316 inox steel body
-  Brackets with 1m pole