



Water Content Monitor WCM511

Water content monitor WCM511 is an optical moisture sensor designed for detecting moisture content of concrete aggregates. The sensor embeds a micro-processor and uses LEDs as light sources. Moisture content is determined as percentage of water by weight of dry aggregate. The sensor is most optimal when used above conveyors or silo feeders to detect moisture content in moving samples. A non-contacting remote measurement guarantees stable performance and long lifetime of the sensor.

Optical WCM511 technology has been extensively tested in concrete plants with different grades of stone material. By proper calibration the accuracy of measuring water content outperforms hand made reference measurements in the case of a limited number of samples and a large variation of moisture in a given batch.

WCM511 has serial RS232 output as well as current loop output.

Features and Benefits:

- Remote optical measurement of moisture content
- Solid state design
 - no moving nor wearing parts
- High accuracy and resolution
- Fast response
- Low noise
- Stable LED light sources
- Temperature compensated
- Easy to install and calibrate
- Output:
 - serial interface RS232
 - current loop 4-20 mA
- Power supply 9-30 VDC

Water Content Monitor WCM511

Sensor type:	Water Content Monitor WCM511
Measures:	length 100 mm, diameter 50 mm, weight 240 g
Cable:	M8 connector (SAC-6P-M8FR), 10 m length
Power supply:	9 ... 30 VDC
Power consumption:	< 5 W
Temperature range:	0 ... 60 °C
Resolution:	0.1 %
Accuracy:	0.3 % by weight (short time, homogenous sample) 0.6 % by weight (long time, homogenous sample)
Measuring range:	1 ... 10 % (stone aggregates) 1 ... 20 % (very fine materials)
Response time:	0.2 ... 10 s, parameter adjustable
Noise level:	< 0.03 % with 1 s response time
Measuring distance:	0.6 ... 1.6 m
Output:	RS-232 serial interface, 4 ... 20 mA per 0 ... 16 % by weight
Installation:	installed optimally at a constant distance over a moving sample and the sensor window dust protected.

