On-line liquid moisture analyzer W300

Description

On-line liquid moisture analyzer W300 of Coliy Technology GmbH is currently the most advanced product in the world for measuring moisture content of liquids with the characteristics of solidity, durability, and high sensitivity. The measurement accuracy is not affected by air bubbles in liquid or by gas or solids in the liquid. It has no high requirement for water quality and it can detect high mineralized liquids. W300 can detect the water content in almost any liquid, especially suitable for measuring the water content in various oils and industrial chemicals. W300 adopts the latest moisture measurement technology with all parts waterproof and dustproof. It has a hard stainless steel shell that can resist impacts. The unit is designed for long-term running under severe environmental conditions. The unit could be installed in various ways, and is easy to operate. Due to its high accuracy W300 is applied in wide variety of fields.

On-line liquid moisture analyzer W300 uses ultra-high frequency electromagnetic wave principles: It utilizes resonance characteristics of L-band electromagnetic waves to measure moisture through detecting resonant frequency and peak width of objects and at the same time to make temperature compensations thereby accurately measuring the moisture content of media. It is currently the most advanced instrument measuring water content in solids and surpasses those utilizing other principles in terms of resolution range and reliability.

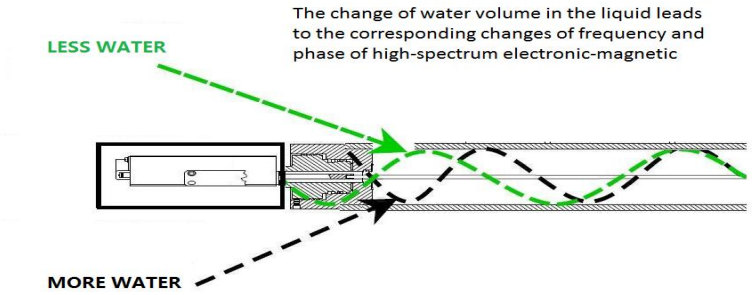
W300 can be supplied to your specific requirements. The resolution can be as high as 10 ppm(0.001%) the range can be chosen between 0-0.1% and 0-100% and has a wide range of applications.

W300 uses the fifth-generation of patent probe. With a built-in temperature sensor the probe makes temperature corrections and compensations through the unique dynamic dedicated calibration software; it has a built-in three-dimensional demarcation data module making the operation and calibration very easy and simple. The host and accessories of W300 have passed CE certification.

Features

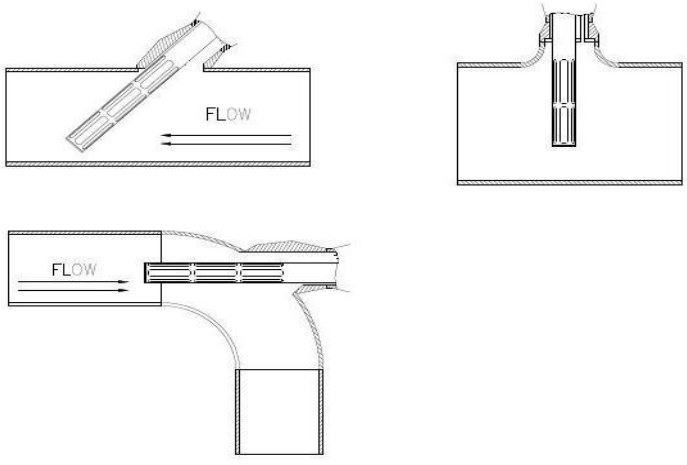
- Advanced measuring principle
- High reliability
- High resolution 10ppm
- Temperature auto-compensation
- Explosion proof design
- Simple calibration
- Flexible installation
- CE certification
- High accuracy to 0.01%
- Stable and durable free of maintenance
- Range to be select manually
- Broad technical support
- Suitable for most liquids.

Working principle



EQUATION : $W=K_1(f_1\,tg\alpha+a)^3 + K_2(f_2\,tg\beta+6)^2+ K_3(f_3\,tg\gamma+c)+K_4$

Drawing of probe installation



Moisture Analyzer

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Specifications

Range	Select manually from 0 - 0.5% or 0 -100%	
Resolution(Laboratory)		
	0.001%	(Range under 1%)
	0.01%	(Range between 1%-10%)
	0.1%	(Range above 10%)
Accuracy(Laboratory)		
	0.02%	(Range 0-1%)
	0.1%	(Range 0-10%)
	0.5%	(Range 0-50%)
	1.0%	(Range 0-100%)
Installation	2” NPT Screw or standard flange DN40	
Insertion depth	Standard 245mm or customized	
Weight	5 to 10 Kg (Subject to installation mode and length)	
Temperature and pressure	Standard: 80ºC 4.0 MPa; high tem.150ºC, 4.0 MPa	
Temperature compensation	Yes (If the temperature of the measuring liquid varies broadly temperature compensation will be necessary.)	
Probe material	304 or 316 stainless steel or titanium	
Explosion proof	Explosion suppression DIICT6(optional)	
Output	RS-485, 4-20mA	
Power	24VDC	
Requirements of measured liquid	All non-polarity liquid and most organic liquids such as: all kinds of petroleum white oil heavy oil crude oil bitumen engine oil electric insulating oil natural vegetable oils and fats; all kinds of organic chemical liquids daily chemical products and beverages as well as: honey wine lees citric acid EDTA propyl alcohol ethyl acetate orange juice and many others.	
Probe style	The unit can be support two probes one hollow and one solid probe which can then be used to measure low viscosity and high viscosity fluids	

Notes:

1. Measurement accuracy has nothing to do with the liquid viscosity.

2. Probe and range can be customized to clients’ special requirements.

3. The product specifications are subject to change without notice along with the technology

progress and innovation.

4. For further information please contact our office we will reply to your inquiries and provide after-sales service within 48 hours. You can contact us any time.

Guide of model selection

W300	-A	-B	-C	-D	-E	-F	-G
	-A Range(optional)						
		-B Pressure Default: 1Mpa 2.5: 2.5Mpa 4: 4.0Mpa					
			-C Temperature Default: <80ºC HT: <300ºC				
				-D Connection mode Default: screw thread F: flange			
					-E probe material Default: 304 stainless steel 316: 316 stainless steel AF: durable stainless steel TI: titanium		
						-F Default: non explosion proof EX: explosion proof	
							-G suffix
W300	-A	-B	-C	-D	-E	-F	-G

Example: W300 - 20% - 4- HT - F - TI – EX