UCS-1

Universal Stationary Gas Meter

CH_4

CO

H_2S
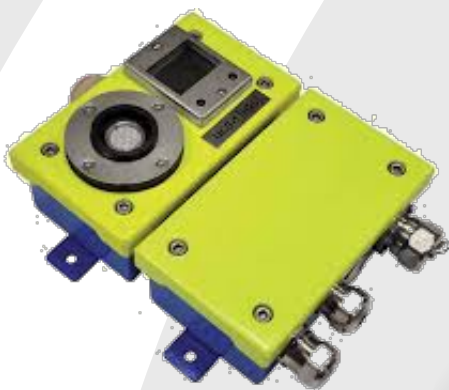
CO_2

O_2

TM

CAT

PAT

PRC

TH

UCS-1

Universal Stationary Gas Meter

ROOTTEL

designing   production   implementation   service

Description of the device

The Universal Stationary Gas Meter type UCS-1 is used to measure oxygen, toxic or explosive gas concentrations or temperature and humidity as well as pressure (depending on the measuring sensor used). The gas meter can cooperate with the MKS-2 measuring center (RS485 digital transmission) or the telemetry center (modem transmission). Optionally, it also has two an analogue output of 0.4..2V and two an alanog input 0..2V allowing cooperation with analog systems. In addition, the sensor can be equipped with two binary contact outputs to support other devices and two binary inputs with line continuity control. The contact outputs have optoisolation and can be controlled by alarms after exceeding pre-set alarm thresholds. It is made in the Ex version and can work in potentially explosive areas. The device can be made in a simple version (single box) or in an extended version (with an additional junction box). They can then be equipped with additional analog and digital inputs and outputs. The UCS-1 device can be equipped with eight digital temperature sensors over a distance of min. 50m.

Basic parameters

Explosion-proof construction feature	Ⓔⓧ I M1 Ex ia I Ma Ⓔⓧ II 2G Ex ia IIC T4 Gb	
Maximum measuring ranges	T = -40°C ÷ 85°C	RH = 0 ÷ 100%
	P= 800 ÷ 1600 hPa	CH4 = 0 ÷ 100%
	CO2 = 0 ÷ 1,5%	O2 = 0 ÷ 25%
	CO = 0 ÷ 2000ppm	H2S = 0 ÷ 200ppm
	PRC = od ±125 Pa do ± 5.000 Pa	
Type of transmission	RS485 or telemetric modem system	
(optional)	0,4 - 2,0V output and 0 - 2V input	
Operating temperature range	od -20°C do 40°C	
Dimensions	150mm x 155mm x 65mm (one box)	
	230mm x 155mm x 65mm (double box)	
Weight	0,9 kg / 1,4 kg	
Level of housing protection	IP-65	