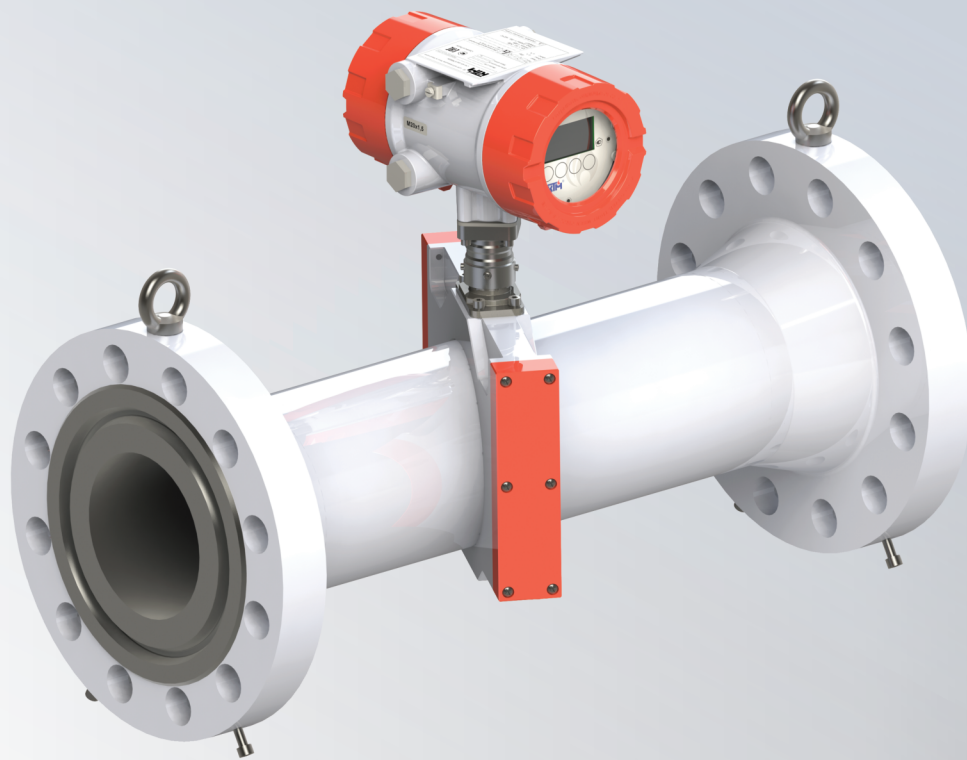


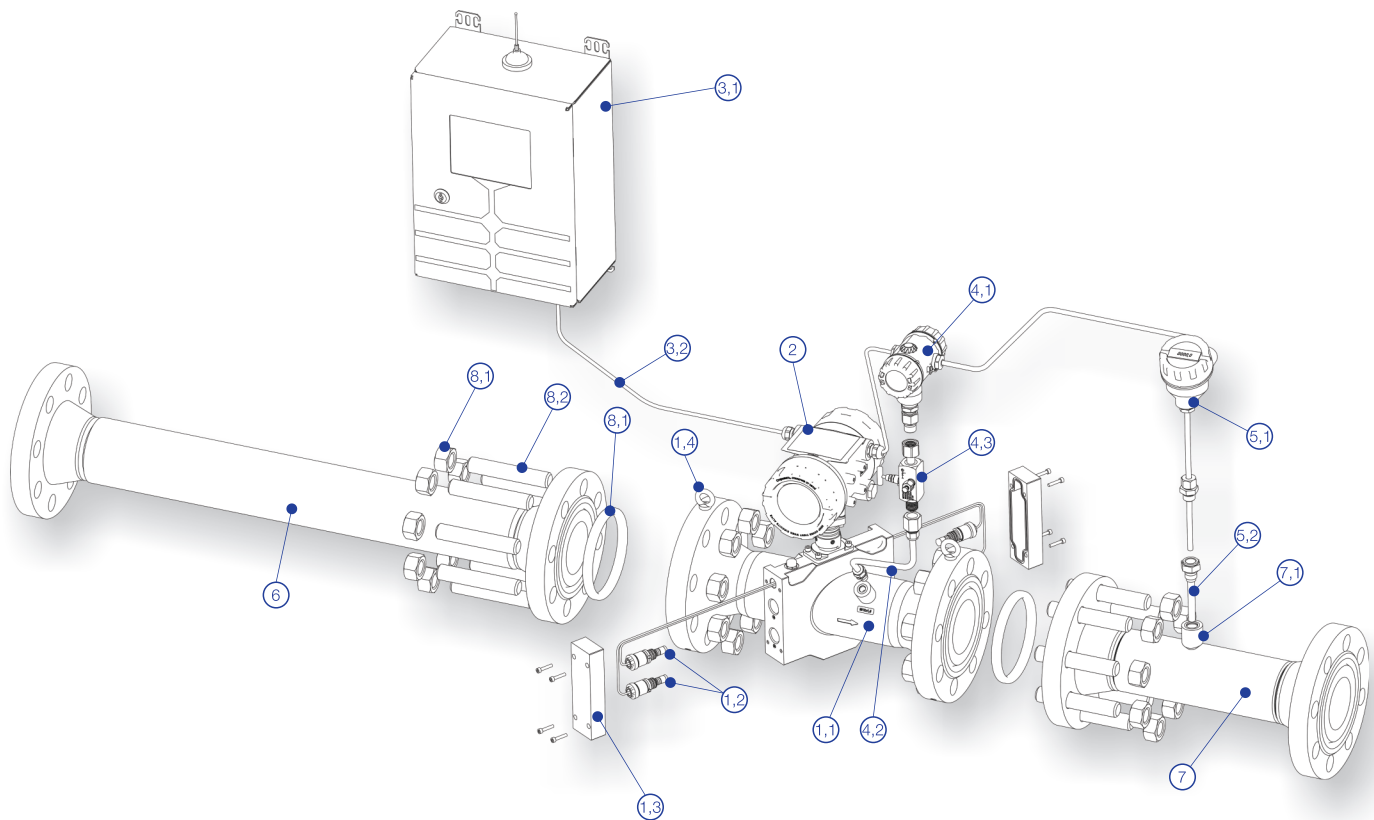
KTM600 RUS[®]

ULTRASONIC FLOW METER
FOR NATURAL GAS AND ASSOCIATED
PETROLEUM GAS MEASUREMENTS



APPLICATIONS

- Natural gas and associated petroleum gas measurement
- Company gas consumption monitoring
- Measurement of gas in gas wells and plumes
- Measurement of gas lift
- As part of the gas measurement unit
- As part of the automated group metering unit
- Measurement of gas in underground gas storage facilities
- Measurement of natural gas, N₂, O₂, air, ethylene
- Measurement of gasses with high H₂S component such as sour gas or biogas
- Onshore and offshore gas measurement applications



Description:

- meter body:
 - spool piece
 - set of ultrasonic transducers
 - cover
 - transportation bolts
- information processing unit (IPU)
- remote interface module:
 - remote module
 - connecting cable

Devices for measuring environmental parameters:

- pressure sensor
 - pressure transmitter
 - pressure tube
 - valve block
- temperature sensor
 - temperature transmitter
 - protective sleeve

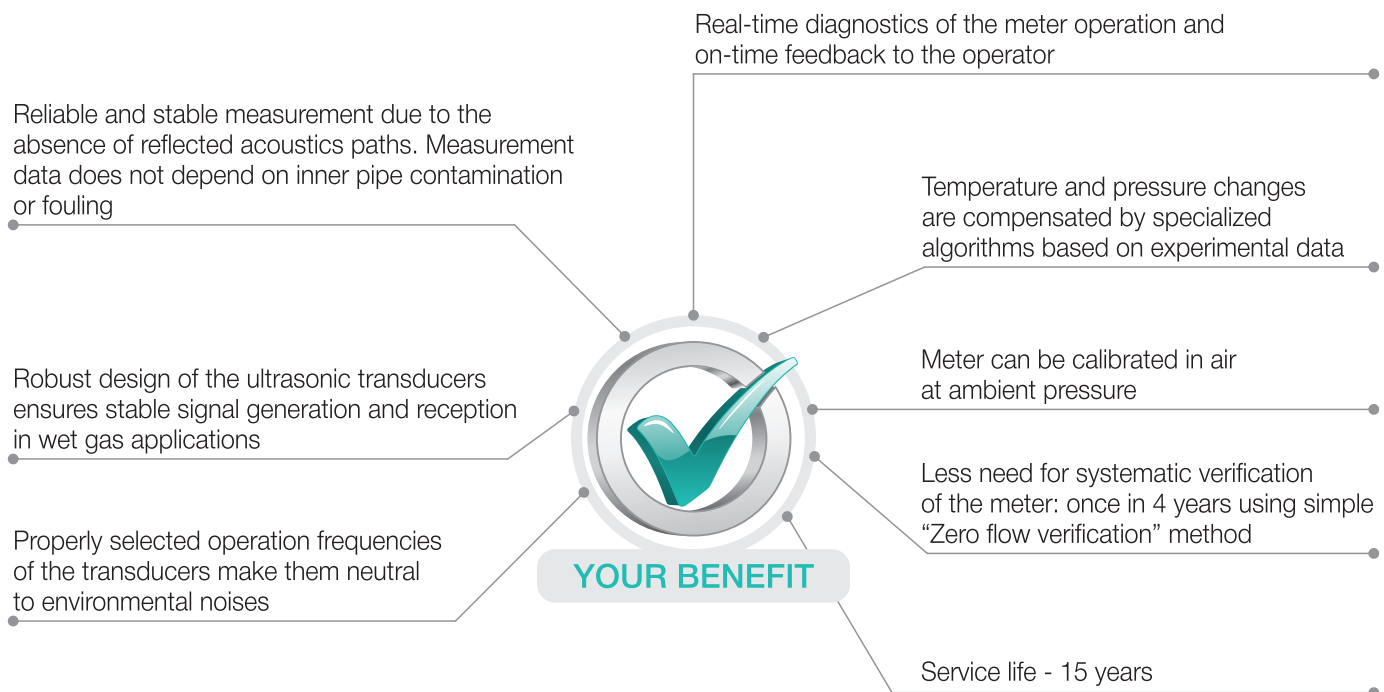
Additional devices:

- straight inlet section 10DN (inlet section)
- straight outlet section 3DN (output section)
 - lug
- fasteners
 - gaskets
 - studs
 - nuts



ULTRASONIC FLOW METER KTM600 RUS

- ✓ Our products are completely developed and manufactured in Russian Federation
- ✓ We have complete set of design and experimental data of our products that verify product quality
- ✓ We have own testing facilities that guarantee product precision and durability
- ✓ We have service centers across the world that can provide complete set of customer support
- ✓ We have robust production line that ensures shortest on-time product delivery to our customers





ULTRASONIC FLOW METER KTM600 RUS

TECHNICAL DETAILS

Parameter name	KTM600 RUS	Notes
Nominal pipe diameter (DN), mm	from 50 up to 1400	
Ambient temperature, °C	-55... +60	Extended range: -65...+65 using thermal cover
Gas temperature, °C	-40... 180	Extended range: -194...280
Storage temperature, °C	-40...+60	
Operating pressure, bar	0... 280	Extended range: Up to 450
Number of measurement paths	2P (parallel paths) 2X (cross paths)	
Number of information processing units (IPU)	1,2*	*- depends on version of device
I/O signals and ports	RS-485	ASCII RS-485/RTU RS-485
	Ethernet	
	Analog	1 output: 4 ... 20 mA
	Digital	3 outputs: + 30 V, 10 mA
Enclosure rating -IPU and Sender-receiver units; -Remote interface module	IP66/IP67 IP54	
Supply voltage, V	12...30	
Power consumption, Watt	Less than 6	

METROLOGICAL PARAMETERS

Parameter name	Error limit
Measuring ranges Volumetric flow a. c., % 2P (parallel paths) 2X (cross paths)	±0,7 - 1 ±1,5 - 3

NOMINAL METER SIZES AND CORRESPONDING MAXIMUM FLOW RATES

Nominal meter diameter	Volume flow rate a.c. m³/h			Maximum gas velocity, m/s
	Q _{min}	Q _t	Q _{max}	
DN				V _{max}
50	4	13	400	65
80	8	32	1000	65
100	13	50	1600	60
150	20	80	3000	50
200	32	130	4500	45
250	50	240	7000	40
300	65	375	8000	33
350	80	375	10000	33
400	120	600	14000	33
450	130	650	17000	33
500	200	975	20000	33
600	320	1500	32000	33
700	400	2000	40000	30
750	400	2000	45000	30
800	400	2400	50000	30
900	650	3750	66000	30
1000	650	5000	80000	30
1050	1300	6000	85000	30
1100	1400	6500	90000	28
1200	1600	7000	100000	27
1300	2000	7300	110000	26
1400	2300	8600	130000	25