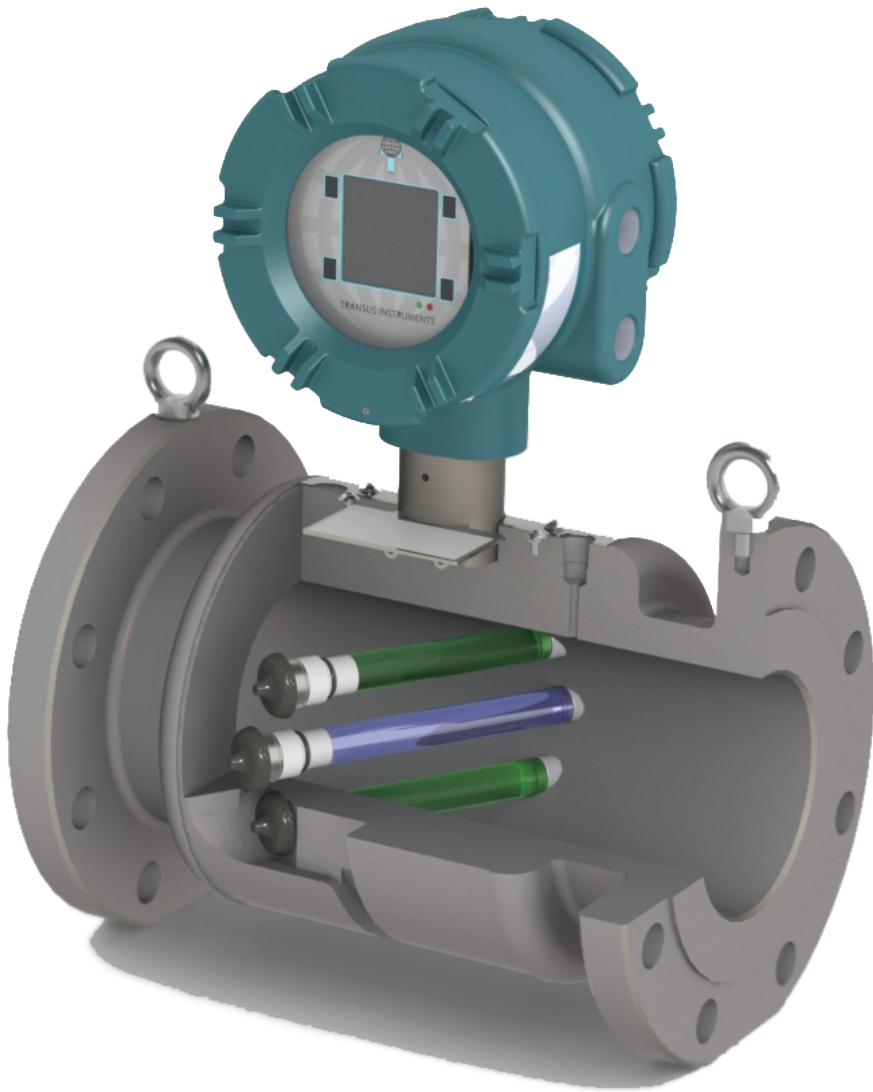




TRANSUS INSTRUMENTS



Technical Datasheet

UIM-3/3F
Metric

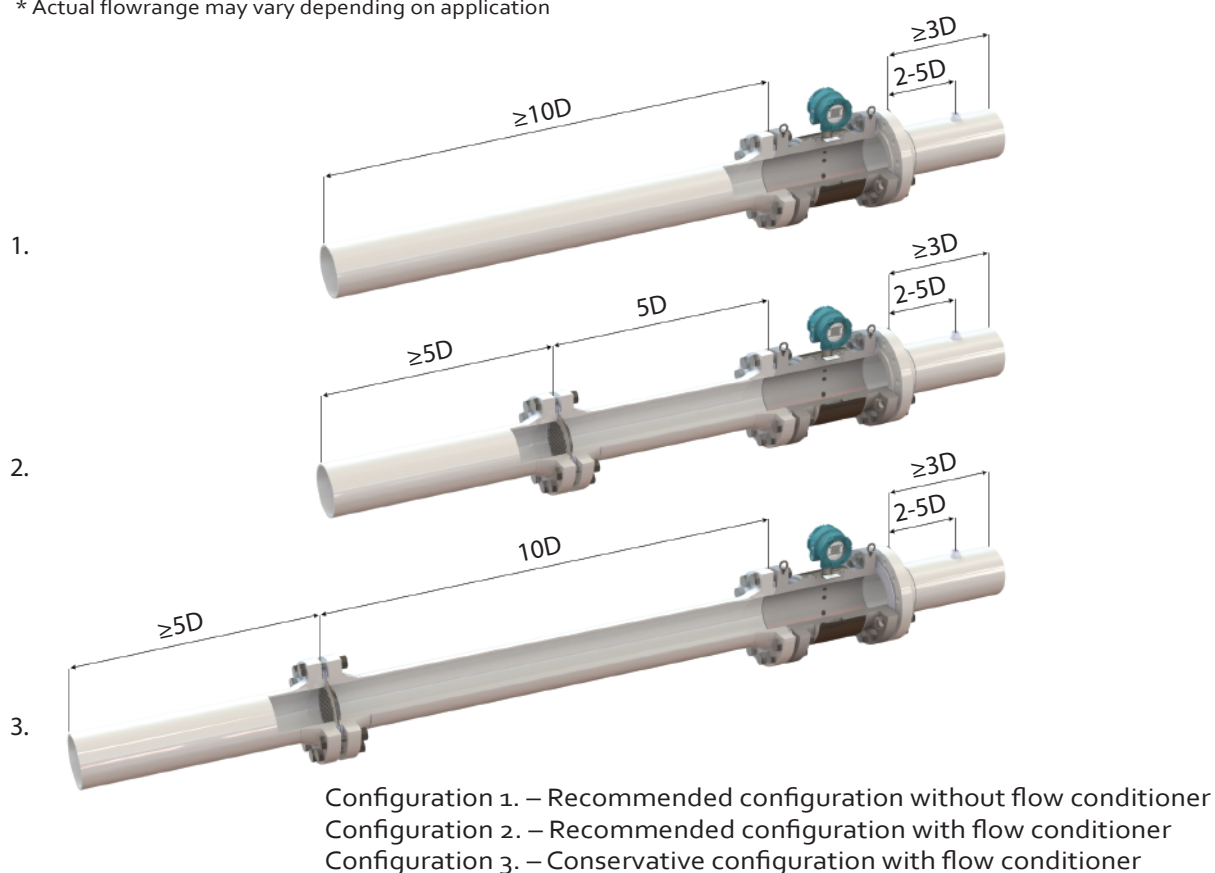
UIM Series Flowmeter

Principle of operation	Broadband continuous wave – transit time
Sizes	150, 300 and 600lbs; 2 – 16", other sizes on request
Flange type	ANSI, DIN, others on request
Pressure ranges	Up to 102 bar (1480 psi), other ranges on request
Ambient temperature	-40 to +60°C (-40 to +140°F)
Process temperature	-30 to +80°C (-22 to +176°F)
Typical uncertainty	1% ($Q_t - Q_{max}$) factory calibration 2% ($Q_{min} - Q_t$) factory calibration 0.5% ($Q_t - Q_{max}$) flow calibration 1% ($Q_{min} - Q_t$) flow calibration
Metrology	UIM-3F: AGA-9 compliant
Repeatability	0.1%
Turndown	100:1 (pipe size dependent)
Meter body materials	Carbon steel ASTM A350-LF2 Cl.1 Stainless steel ASTM A182-F316 Other materials on request
Transducers	All metal Ti Grade 2; retractable version available as option
Pressure port	1/4" NPT female, others on request
Electronic enclosure material	Epoxy painted, low copper aluminum alloy
Electronic enclosure cable entry	M20x1.5 female 1/2" NPT female
Power supply	Main power: 14 - 28.8V, 670mW max I/O option board power: 10.8 - 28.8V, 225mW max
User interface	128x128 dot matrix LC Display, 4 keys
Interface ports	1x USB (not intrinsically safe) 1x Frequency output
Optional interface ports	<u>I/O Option Board</u> 1x RS485, two wire, externally powered 2x Digital, software configurable 1 x 4-20mA loop powered output (pending) <u>PT Option board</u> Pressure and temperature sensors <u>4-20mA/HART Option Board</u> 1 x 4-20mA loop powered output (HART pending)
Communication protocols	MODBUS (RS485 and USB)
Hazardous area certification	ATEX EX II 1 G Ex ia IIC T4 Ga, Zone 0 IECEX Ex ia IIC T4 Ga FM - Class I, Division 1, Group A,B,C,D T4 (PENDING)
Ingress Protection	IP66, NEMA 4X

Flowranges and configurations

	Nominal Size	Schedule	Internal diameter [mm]	Flow [m ³ /hr]			Turndown
				Qmax	Qt	Qmin	
Flowranges metric	2" / DN50	40	52.5	320	32	4	80
		80	49.3	280	28	4	70
	3" / DN80	40	77.9	610	61	7	88
		80	73.7	540	54	7	78
	4" / DN100	40	102.3	1000	100	12	84
		80	97.2	900	90	11	82
	6" / DN150	40	154.1	2020	202	21	97
		80	146.3	1820	182	19	96
	8" / DN200	40	202.7	3490	349	35	100
		80	193.7	3190	319	32	100
	10" / DN250	40	254.5	5500	550	55	100
		80	242.9	5100	510	51	100
	12" / DN300	STD	304.7	7900	790	79	100
		80	289.0	7100	710	71	100
	14" / DN350	STD	336.5	9700	970	97	100
		80	317.5	8600	860	86	100
	16" / DN400	STD	387.3	12800	1280	128	100
		80	363.5	11300	1130	113	100
	18" / DN450	STD	437.9	16300	1630	163	100
		80	409.3	14300	1430	143	100
	20" / DN500	XS	482.6	19800	1980	198	100
		80	455.6	17700	1770	177	100
	24" / DN600	XS	584.6	28100	2810	290	97
		80	547.7	24600	2460	255	97
	30" / DN750	30	730.2	42300	4230	453	94
		wt = 35	692.0	38000	3800	407	94

* Actual flowrange may vary depending on application



Dimensions and weights

Dimensions and weights - metric	Nominal Size [inch]	Rating	A- Length [mm]	B- Width [mm]	C - Height [mm]	Weight [kg]
	2" / DN50	150	260	155	340	25
		300	260	165	346	27
		600	280	165	360	30
	3" / DN80	150	300	190	372	35
		300	300	210	382	36
		600	320	210	400	44
	4" / DN100	150	300	230	410	43
		300	300	255	422	50
		600	350	275	447	78
	6" / DN150	150	350	280	457	57
		300	400	320	477	96
		600	400	355	510	123
	8" / DN200	150	450	345	515	145
		300	500	380	532	175
		600	500	420	570	197

* Actual weights and dimensions may vary for specific designs

