

UFM-55 | Data Sheet

UFM-55 Portable Ultrasonic Doppler Flowmeter

for accurate flow measurement from outside a pipe

Features:

- It is suitable for pipe Ø ranging from 40 to 4000mm
- For dirty liquids, a certain amount of air bubbles or suspended solids shall be contained
- Excellent low flow rate measurement ability, low to 0.05m/s
- A wide range of flow measurement, high flow rate can reach 12m/s
- High-temperature transducer is suitable to liquids of -35°C ~ 200°C
- Do not need to shut down the pipe flow when installing the transducers
- User-friendly configuration
- 4-20mA, Relay Totalizer and Relay Alarm outputs
- Accuracy: 2.0% Calibrated span
- Rechargeable battery can work up to 14 hours

U-F-M-55 MENU TAB ENTED WARRE ON OFF Pertable Doppler Flow Meter

Applications:

- Raw sewage
- Activated sludge
- Ground water
- Pulp and paper slurries
- Chemical slurries
- Drainage
- Mining recirculation





Technical Parameters

Specifications: Transmitter

Resolution 0.25mm/s Repeatability 0.2% of reading Accuracy 0.5% 2.0% F.S. Response time 2-60s for optional Flow Velocity Range 0.05- 12 m/s Liquid Types Supported Liquids containing 100ppm of reflectors and at least 20% of the reflectors are larger than 100 micron. Power Supply AC: 85-265V Enclosure type Handheld Degree of protection IP65 according to EN60529 Operating temperature -20°C to +60°C Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA, relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter: 235X125X45mm case:410X320X80mm Weight 0.6kg	Measurement principle	Doppler ultrasonic
Accuracy 0.5% 2.0% F.S. Response time 2-60s for optional Flow Velocity Range 0.05- 12 m/s Liquid Types Supported Liquids containing 100ppm of reflectors and at least 20% of the reflectors are larger than 100 micron. Power Supply AC: 85-265V Enclosure type Handheld Degree of protection IP65 according to EN60529 Operating temperature -20℃ to +60℃ Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Resolution	0.25mm/s
Response time 2-60s for optional Flow Velocity Range 0.05- 12 m/s Liquid Types Supported Liquids containing 100ppm of reflectors and at least 20% of the reflectors are larger than 100 micron. Power Supply AC: 85-265V Enclosure type Handheld Degree of protection IP65 according to EN60529 Operating temperature -20℃ to +60℃ Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized Communication 4-20mA,relays for Totalizer and alarm output keypad Size Transmitter:235X125X45mm case:410X320X80mm	Repeatability	0.2% of reading
Flow Velocity Range 0.05- 12 m/s Liquid Types Supported Liquids containing 100ppm of reflectors and at least 20% of the reflectors are larger than 100 micron. Power Supply AC: 85-265V Enclosure type Handheld Degree of protection IP65 according to EN60529 Operating temperature -20°C to +60°C Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Accuracy	0.5% 2.0% F.S.
Liquid Types Supported Liquids containing 100ppm of reflectors and at least 20% of the reflectors are larger than 100 micron. Power Supply AC: 85-265V Enclosure type Handheld Degree of protection IP65 according to EN60529 Operating temperature -20℃ to +60℃ Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Response time	2-60s for optional
are larger than 100 micron. Power Supply AC: 85-265V Enclosure type Handheld Degree of protection IP65 according to EN60529 Operating temperature -20°C to +60°C Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Flow Velocity Range	0.05- 12 m/s
Enclosure type Handheld Degree of protection IP65 according to EN60529 Operating temperature -20℃ to +60℃ Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Liquid Types Supported	
Degree of protection IP65 according to EN60529 Operating temperature -20℃ to +60℃ Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Power Supply	AC: 85-265V
Operating temperature -20℃ to +60℃ Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Enclosure type	Handheld
Housing material ABS Measurement Channels 1 Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Degree of protection	IP65 according to EN60529
Measurement Channels Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Operating temperature	-20℃ to +60℃
Display 2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable) Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Housing material	ABS
Units User Configured (English and Metric) Rate Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Measurement Channels	1
Rate and Velocity Display Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Display	2 line × 8 characters LCD, 8-digit rate or 8-digit total (resettable)
Totalized gallons, ft³, barrels, lbs, liters, m³,kg Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Units	User Configured (English and Metric)
Communication 4-20mA,relays for Totalizer and alarm output keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Rate	Rate and Velocity Display
keypad 6pcs buttons Size Transmitter:235X125X45mm case:410X320X80mm	Totalized	gallons, ft³, barrels, lbs, liters, m³,kg
Size Transmitter:235X125X45mm case:410X320X80mm	Communication	4-20mA,relays for Totalizer and alarm output
	keypad	6pcs buttons
Weight 0.6kg	Size	Transmitter:235X125X45mm case:410X320X80mm
	Weight	0.6kg

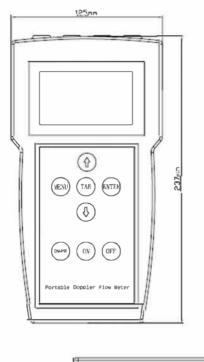
Specifications: Transducer

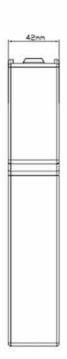
Clamp-on
IP65. IP67 or IP68 according to EN60529
Std. Temp.: -35°C~85°C for short periods up to 120°C
High Temp.: -35°C~200°C for short periods up to 250°C
40-4000 mm
60(h)*34(w)*33(d)mm
Aluminum for standard temp. sensor,and peek for high temp. sensor
Std: 5m

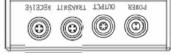


Technical drawings

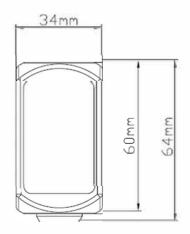
Transmitter:







Transducer:







Images











Summary

UFM-55	Handheld Doppler Clamp-on Series Flowmeters
	Power supply
	A 85-265VAC
	Output Selection 1
	N N/A
	1 4-20mA
	2 Relay for Totalizer
	3 Relay for Alarm
	Output Selection 2
	Same as above
	Sersor Type
	S Standard Clamp-on transducer (DN40-4000)
	Transducer Temperature
	S -35~85°C (for short periods up to 120°C)
	HT -35~200°C (for short periods up to 250°C)
	Pipeline Diameter
	DN-K1 e.g.DN40—40mm, DN4000—4000mm
	Cable length
	5m 5m (standard 5m)

A - 1 - 2 /LDH- S - S - DN100 - 5m UFM-55 (example configuration)



