



# TURBINE FLOW METER BATTEY OPERATED



**Model No.  
UPC-BTFM-011**

**HSN CODE: 90261010**

**UPC Instruments Pvt. Ltd.**

**An ISO 9001:2015, 14001-2015 CE & TÜV SÜD Certified Company**

# TURBINE FLOW METER

## UPC-TFM-011



### Salient Features:

- **UPC-TFM- 011**
- **Simple & cost effective Construction Suitable for non conductive clear liquids**
- **Local Indication through LCD**
- **Durable & Versatile**
- **Easy Maintenance**
- **Die Cast Aluminum IP-67 Housing**
- **Remote Display optionally available**

### Description:

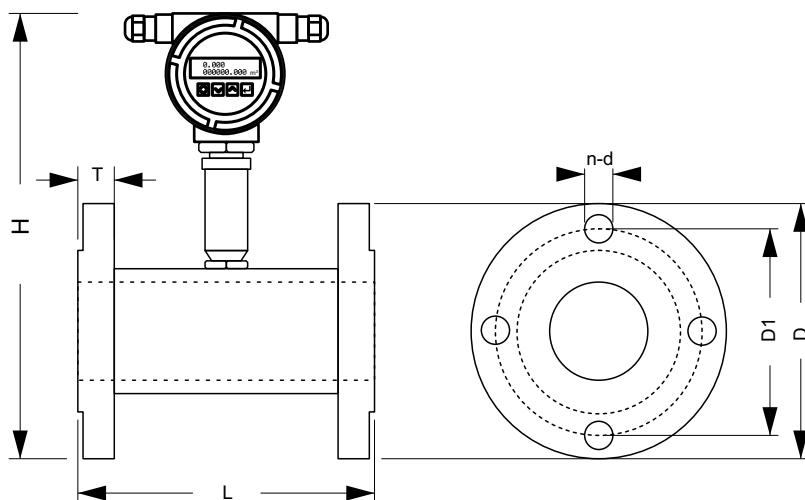
A turbine flow meter is constructed with rotor and blades that use the mechanical energy of the fluid to rotate the rotor in the flow stream. Blades on the rotor are angled to transform energy from the flow stream into rotational energy. the rotor shaft spins on bearings. when the fluid moves faster, the rotor spins proportionally faster. shaft rotation can be sensed mechanically or by detecting the movement of rotor blades.

Rotor movement is often detected magnetically, where movement of the rotor generates a pulse. when the fluid moves faster, more pulses generated. Turbine flow meter sensors detecting the pulse are typically located external to the flowing stream to avoid material of construction constraints that would result if wetted sensors were used. the RPM of the turbine wheel is directly proportional to the mean flow velocity within the tube diameter and corresponds to the volume flow over a wide range.

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Sr.no.	Technical Specifications	
1	Media	: Liquids (Clear)
2	Viscosity	: 100 cp max
3	Line Size	: 15 NB to 200 Nb
4	Display	: 16x2 LCD-4 digit or flow rate & digit for totalized flow (flow rate & totalized flow will be visible through toggle key)
5	Transmitter Electronics	: option 1: Integral : option 2: Remote
6	Type of Output	: Rs485
7	Calibration Range	: As per requirement (Factory Calibrated)
8	Accuracy	: $\pm 1\%$ of F.S. (For 20-100% Flow)
9	Linearity	: $\pm 1\%$
10	Repeatability	: $\pm 1\%$
11	Pressure Drop	: Approx. 0.28 kg/cm <sup>2</sup> at max flow
12	Turn down ration	: 10:1 or 100:1
13	Process Temperature	: 0-120 Deg. C max
14	Process Pressure	: 0-20 kg/cm <sup>2</sup> max
15	Material of construction	: Bearing-Tungsten Carbide Sleeve/V Jewel Rotor-SS410/17.PH Shaft-Tungsten Carbide Body/Support/Flanges-SS
16	Power Supply	: Lithium Ion Battery
17	Power Consumption	: <0.5 VA
18	Response Time	: <100mSec
19	Temperature Coefficient	: $\pm 0.01\%$ per degree C
20	Transmitter enclosure	: Die Cast Aluminum IP 67
21	Process Connections	: 1) ASA 150 RF, Flanged as per table B 16.5 2) BSP(M), Threaded (upto 50 NB only) 3) SS Tri-clover (Upto 50NB only)
22	Mounting	: In-line (Horizontal or Vertical)
23	Operating conditions	: Temp:0-55Deg. C, Humidity 5-95% non condensing

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L = Flange to flange length.  
 H = Total height of meter.  
 D = OD of the flange.  
 D1 = PCD of the flange.  
 d = Drill size of flange.  
 n = No of holes.  
 T = Thickness of flange.

Sr.no.	Size	Flow Range	L	H	D	D1	d	n	T
	(mm)	(m³/h)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
1.	DN 15	0.6~6	75	250	88	60.40	15.90	4	15
2.	DN 20	0.8~8	90	256	98	69.90	15.90	4	16
3.	DN 25	1~10	110	263	108	79.20	15.90	4	16
4.	DN 32	1.5~15	140	272	117.3	88.9	15.90	4	16
5.	DN 40	2~20	140	280	127	98	15.90	4	19
6.	DN 50	4~40	150	298	152.4	120	18	4	19
7.	DN 65	7~70	200	318	178	139.70	19	4	19
8.	DN 80	10~100	200	332	190.50	152.40	19	4	19
9.	DN 100	20~200	250	361	228.60	190.50	19	8	19
10.	DN 125	25~250	300	386	254	215.9	19	8	22.20
11.	DN 150	30~300	300	411	279.40	241.30	22.20	8	22.20
12.	DN 200	80~800	350	468	342.9	298.5	22.20	8	22.20

## WARRANTY

All meter are warranted against any manufacturing defect for a period of 12 months from date of supply, provided the meter has not been misused, damaged, installed for services it is not recommended or the seal has been tampered with. The company shall be liable to furnish part/ parts thereof or full water meter as the company may deem fit.

**UPC INSTRUMENTS PVT.LTD.**  
AN ISO 9001:2015, 14001-2015 CE & TÜV SÜD CERTIFIED COMPANY

Office: Plot No. 18, Towel Market, Gohana Road, Panipat-132103 (HARYANA)

Manufacturing Unit: Plot no.125,Near Tehsil, Dinger Majra Road, Gharaunda, Karnal-132114 (HARYANA)

✉ : info@unitechmeter.com ✉ : ho@unitechmeter.com ✎ : www.unitechmeter.com

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