TECHNICAL SPECIFICATIONS FOR **3D VELOCITY METER**

Sl.No	Description	Specification
Type of measuring device		
1	Velocity measurement device	3D type
2	Measurement technique	Acoustic Doppler velocity measurement
Application and measurement parameters		
3	Application	Under water flow velocity measurement
4	No. of velocity components	3
5	Operating Temperature	Ambient (0-40° C)
6	Velocity range	± 0.03 to 4 m/s
7	Accuracy	±0.5 % of measured value ± 1 mm/s
8	Min. distance from wall	5 cm
9	Sampling rate	200 Hz
10	Acoustic Frequency	10 MHz
Item list		
11	Quantity	1 (One) set of probe-instrument, hardware, software
12	Probe type	Down looking probe
13	Probe to instrument connection	fixed stem type
Software & Hardware		
14	Software	Deployment planning, instrument configuration, data retrieval and conversion
15	Hardware	Suitable hardware for online signal processing
16	Output to desktop or laptop	Suitable output connector arrangement for connecting with laptop/desktop. Laptop / desktop are not part of the supply.
Material		
17	Probe material and Housing	Stainless steel (316) probe ; POM housing
18	Cable	10m signal processor cable with Impulse underwater connector
Power		
19	DC input	12-48V DC
20	Max. consumption	1.5 W at 200 Hz
Dimensions		
21	Maximum diameter	66 mm
22	Maximum length	350 mm (housing only), 365 mm (fixed stem)
Weight		
23	Weight in air	1.2 kg
24	Weight in water	Neutral

Dr. SOUMENDRA NATH KUIRY
Assistant Professor
Department of Civil Engineering
Indian Institute of Technology Madras
Chennai - 600 036, India