

BILL OF QUANTITIES (DEC 2025)

Item No.	Component	Description	Qty	Unit Cost (USD)	Total (USD)
1	ESP32 DevKit V1 (ESP32-WROOM-32)	Main microcontroller for flow data acquisition, processing, and system control	1	\$10.25	\$10.25
2	MP1584EN DC-DC Buck Converter	High efficiency step-down voltage regulator for stable 5V / 3.3V power supply	2	\$7.50	\$15.00
3	SIMCOM 4G LTE Module (SIM7600E-L1C)	Cellular communication module for real-time data transmission via LTE network	1	\$23.70	\$23.70
4	Turbine Flow Sensor (DN50)	High-capacity turbine-type flow sensor with pulse output	1	\$7.00	\$7.00
5	Turbine Flow Sensor (DN25)	Turbine-type flow sensor for low to medium flow measurement	1	\$13.00	\$13.00
6	Prototype PCB Board	Board for mounting and interconnecting electronic components	1	\$2.50	\$2.50
7	PETG 3D Printing Filament	PETG filament (1 kg spool) for fabrication of sensor mounts, brackets, and internal holders	1	\$13.75	\$13.75
8	Enclosure	Custom 3D-printed enclosure (PETG); weight = 114 g, printing rate = \$0.25/g (114g × \$0.25 = \$28.50)	1	\$28.50	\$28.50
				Subtotal	\$113.70

Hardware Subtotal: **\$113.70**

Shipment: **\$17.00**

Grand Total: **\$130.70**