1) Avery Weigh-Tronix – ZM223 Indicator

- Measures: **kg**
- Connectivity: **Ethernet, USB, Bluetooth**
- Data: **REST API / MQTT / Cloud-ready**
- Use: Industrial IoT, dashboards, automation
- Status: **Already used in real factories**

2) METTLER TOLEDO – IND Series

- Measures: **kg**
- Connectivity: **Ethernet, RS-232, USB**
- Data: **OPC-UA / MQTT / Web interface**
- Use: Manufacturing, tank & platform weighing
- Status: **High-end, industry standard**

3) OHAUS – Defender 5000

- Measures: **kg**
- Connectivity: **RS-232 (default), USB, Ethernet, Wi-Fi/Bluetooth (optional)**
- Data: Serial / TCP-IP to software
- Use: Warehouses, production floors
- Status: **Widely available**

4) Adam Equipment – Industrial Scales

- Measures: **kg**
- Connectivity: **RS-232, USB, Bluetooth (module)**
- Data: PC software → Cloud
- Use: Cost-effective IoT setups
- Status: **Common in colleges & SMEs**

5) Any Digital Scale + RS-232 → Wi-Fi IoT Gateway

- Measures: **kg**
- Connectivity: **Wi-Fi / Ethernet**
- Data: Sent to **cloud dashboard**
- Use: Retrofit existing scales
- Status: **Most practical in India**

System Data Flow Architecture

1. The weighing scale measures weight in kilograms
2. Weight data is transmitted via RS-232 / USB / Ethernet / Wireless
3. A gateway, indicator, or PC receives the data
4. Data is uploaded to a cloud or local software dashboard
5. Software performs analytics and kg-to-liter conversion
6. Final values are displayed and stored digitally

In dairy and liquid-based applications, IoT weighing systems are combined with software logic to convert weight into volume. This approach ensures accurate billing, inventory tracking, and quality control. Some advanced systems also integrate temperature sensors and milk analyzers to improve conversion accuracy.

Existing IoT-enabled weighing machines available in the market accurately measure weight in kilograms and support digital data transmission through wired and wireless communication interfaces. Measurement in liters is derived through software-based density conversion rather than direct hardware measurement. These systems are reliable, scalable, and suitable for industrial, warehouse, and dairy applications.