Three components are central to the Tru-Test Electronic Milk Meter system.

- **Tru-Test Electronic Milk Meter**
- **Tru-Test Data Handler**
- **Milk sample vials**

Tru-Test Electronic Milk Meter (EMM) has been developed in close association with Herd Improvement Organisations to ensure an integrated operation from farm to laboratory.

Tru-Test Electronic Milk Meter is an ICAR approved portable device that will automatically record milk yield, automatically dispense a representative sample, read uniquely identified milk sample vials, and communicate wirelessly with the Tru-Test Data Handler.

Cow number entry is done via the Tru-Test Data Handler that automatically matches the milk sample vial, cow number and milk yield information. Milk yield and cow numbers no longer have to be recorded by hand.

The milk sample vials used with the Tru-Test Electronic Milk Meter can be uniquely identified by either barcode labels or by RFID tags. Sample vials do not need to be sequenced in trays.

Tru-Test Electronic Milk Meter system can interface to animal RFID systems allowing fast, accurate and seamless linking of data.

**Features**

- **Uses a uniquely identified sample vial** so that the sample in the vial is electronically linked to a cow identification number.
- **Smart software** in the milk meter checks that there is a new sample vial fitted and the cow number is entered before commencing automatic sampling.
- **Milk yield** is recorded on the farm by the meter.
- **Sample** is stirred and then precisely dispensed – automatically.
- **Battery operation** for ease of use in all parlours and barns.
- **Utilises** the well proven Tru-Test proportional milking head.
- **Data Handler** uses radio frequency (RF) to communicate with the EMM.
- **Herd information** can be preloaded into the Data Handler for on-the-spot checking for errors.
- **Data Handler link** allows printouts of yield on the farm, on the day of the test and two way communication with the herd recording database.
- **Software based** so that the system can be tailored to customer’s requirements.
- **Can take animal IDs** from RFID tags, speeding up the entry of animal IDs and minimising errors.
- **Data Handler Bluetooth interface** to PDA devices.
- **Data Handler** has flexibility to be used with other systems, for example Tru-Test mechanical WB Milk Meters.
- **ICAR approved.**

**Traceability from farm to laboratory**

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Tru-Test Electronic Milk Meter

Case housing electronics: IP67 waterproof
Battery run time: 40 hours typical
Time to recharge battery: <10 hours typical
Two keys:
- Select, Finished Milking, Release Sample
Three lights:
- Action Required, Low Battery, End of Milking
Sample size:
- User defined, 20-30 ml typical
Weight:
- 1.6 kg without bracket
- 19 mm diameter
Bracket options:
- Portable
- Parlour
Inlet tube:
- 19 mm diameter

Tru-Test Data Handler

Display:
- 2 x 16 alpha-numeric LCD with backlight
Case:
- IP67 waterproof
Battery run time:
- Up to 26 hours
- <10 hours typical
Time to recharge battery:
- <10 hours typical
Waterproof:
- Tested for typical washing procedures
Interface to PC:
- USB or Bluetooth
Interface to printer:
- RS232 serial communication
Size:
- Height 160 mm
- Width 100 mm
- Depth 38 mm
Weight:
- 0.4 kg
RFID tag reader compatibility:
- Bluetooth or
- RS232 serial interface
Printer compatibility:
- Baud rate 9600 bps
- 8 data bits, no parity
- Continuous paper feed
- Duplex, X-on / X-off protocol

Milk Sampling Vials

Bar code label:
- Interleaved 2 of 5, 7 digit + check digit
- Waterproof, tested for typical washing procedures
- Orientation bars parallel to vial
- Barcode starts from the bottom of the label
RFID chip:
- 13.56 MHz read-write
Vial size:
- Diameter 28.9 mm
- Length 75.6 mm
Vial material:
- Polypropylene
Vial colours:
- Amber
- Clear
Cap colours:
- Green / Red / Yellow
(Note: the green cap is tighter than the red and yellow caps. The red and yellow caps are suitable for mechanical / robotic handling applications.)

(These details are for standard vials. Customer variations are available.)