# STATIC 3-PHASE WHOLE CURRENT ENERGY METER

## R326-C3

With Door Open Feature


**R326-C3** is an advanced static three phase whole current residential and commercial energy meter. It's one of a kind product that conforms to various IEC and local utility standards enabling it to be an ideal candidate for a multi-vendor environment. To resolve energy theft prevalent in local market, R326-C3 is carefully designed with stringent anti-tampering features.

MicroTech Industries (Pvt) Ltd.

Redefining Technological Horizons

## Features

- Reading Display in Case of Power Outage/Failure with the help of batteries and super capacitor.
- Fulfills IEC 62053-21 & IEC 62053-23, Accuracy Requirements
- Active, Reactive Energy & Power Measurement
- Reading Display in Case of Power Outage/Failure
- Power Factor
  - ✓ Instantaneous (by Phase & Average)
  - ✓ Monthly Average (by Rate and Total)
- Meter body opened Indication on LCD (OPENEd).
- Identification and Storage of Reverse Energy Flow Event with Date and Time Stamp
- MDI TOD (time of day)
- Records Energy Accurately at Low/High Voltage
- Low Battery Indication
- Impulse Output Display on LED for kWh
- Impulse Output Display on LED for kvarh
- Running Quadrant Display
- IrDA / Optical Communication Port for Laptop / PC
- Programming of Tariff and Seasons through EMS (Energy Management System)
- Long Life, Clear, Wide and High Contrast Display with Broad Viewing Angle
- Phase Indication (A, B, C) and Indication of Load with Blinking Circle Around the Respective Phase on LCD
- Display Off in case of Power Outage to Increase Battery Life. Display can be On by pressing First Push Button.

## Security Features

- The meter is protected against any loss of data and functional performance due to any external interference such as influence of CD drive, mobile phones and complies to all relevant IEC/ANSI standards.
- The meter is protected against the influence of strong magnetic field.
- Identification and storage of reverse energy flow event with date and time stamp.
- Each meter has a unique serial number in its memory which can be displayed on the LCD.
- Provides 3 Levels of Access /Security Codes.
- Meter Keeps on Operating with or without Neutral Wire.
- Over and Under Voltage Indication (↑↓)
- Demand Over Load Warning

## Billing Record

Monthly reading for last 24 months of 4 tariffs and totals (TL) of the following:

- kWh
- kvarh
- Cumulative MDI(kW)
- Current Month MDI(kW)
- Avg. Power Factor(PF)

## Event Record

More than 30 different types of Events are available with Date & Time Stamp such as:

- Power Outage
- Phase Fail
- Reverse Energy
- Reverse Polarity
- EMS Login
- Over Load
- Over Voltage
- Under Voltage
- MDI Reset
- Battery Low
- Time Change
- Parameters Change
- Register Reset
- etc.

## Load Profiling

4 channel recording of load profile data with 30 min interval for 90 days, 60 min interval for 180 days and 24 hour interval for 12 years. Load profile data is stored in non-volatile memory (EEPROM).

## General Specifications

| | |
|---|---|
| Reference Standards | IEC 62053 -21 & IEC 62053-23 |
| Reference Specifications | DDS - 60 : 2007 |
| Model Number | R326-C3 |
| Connection Wiring | 3-Phase, 4-Wire |
| Connection Configuration | Direct Connected (Whole Current) |
| Metrology | Four Quadrants |
| Display | LCD type |
| Display Resolution | 6 Digits |
| Storage of Data | Non-Volatile Memory (EEPROM) |
| Supported Protocol | IEC 62056-21 |
| Temperature Range | |
| ✓ Specified Operating Range | -25°C to 60°C |
| ✓ Limit Range of Operation (Extreme Condition) | -25°C to 80°C |
| ✓ Limit Range for Storage & Transportation | -25°C to 80°C |
| Relative Humidity | Up to 95 % |

## Electrical Specification

| | |
|---|---|
| Operating Voltage | 3×230/400V |
| Basic / Max Current | 10 / 100 A |
| Reference Frequency | 50Hz |
| Accuracy Class | |
| ✓ For Active Energy | Class 1.0 |
| ✓ For Reactive Energy | Class 2.0 |
| Meter Constant | |
| ✓ Active & Reactive | 1250 imp. / kWh |
| Starting Current | Less than 40mA |
| Power Consumption | |
| ✓ Voltage Circuit | Less than 2W, 10 VA |
| ✓ Current Circuit | Less than 4VA (at basic current) |

## Dielectric Strength

| | |
|---|---|
| Power Frequency | 4 KV for One Minute |
| Impulse Voltage | 8 KV: 1.2/50 Micro Sec |
| Short Time over Current | 3000 Amperes for 10 ms |
| Insulation Resistance | More than 5 Mega Ohms |
| Creepage Distance | 20mm Minimum |
| DC Magnetic Field | 1000 Amp/Turns |
| AC Magnetic Field | 400 Amp/Turns |

## Instantaneous Quantities Display

| | |
|---|---|
| Voltages | $U_1$, $U_2$, $U_3$ |
| Current with Indication of Direction | $I_1$, $I_2$, $I_3$ (⇄) |
| Phase Indication | A, B, C |
| Load Indication (Blinking circle around the present phase) | Ⓐ Ⓑ Ⓒ |
| Active Power (kW) with indication of direction | $kW_1$, $kW_2$, $kW_3$ (⇄) |
| Reactive Power Phase Wise | $kvarh_1$, $kvarh_2$, $kvarh_3$ |
| Apparent Power Phase Wise | $kVA_1$, $kVA_2$, $kVA_3$ |
| Power Factor by Phase | $PF_1$, $PF_2$, $PF_3$ |
| Meter Clock | Time, Date |
| Tariff Indication | $T_1$, $T_2$, $T_3$, $T_4$ |
| Frequency | Fr- Hz |
| Battery Voltage | btry-3.65V |

## Weight and Dimensions:

| | |
|---|---|
| Weight | 2.25kg (±5%) |
| Dimensions | 25 x 24.2 x 8.2(cm) |

**MicroTech Industries (Pvt.) Ltd.**

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