

# Liberty 310

Liberty 310 is a three-phase token-less smart meter for pay-as-you-go and managed credit applications. Encrypted vend codes are used to transfer credit between the online vending system and the meter. Liberty 310 maintains its own energy account, which supports multi-rate tariffs with features such as public holidays and 'friendly credit' periods.

The meter interfaces with an In-home Display (IHD), which provides real-time and historical information on consumption and accounting. Consumers can readily see how much energy they are using, how much it is costing (per hour), how much credit is left and how long it will last, based on the current rate of consumption. Liberty 310 also provides historical data, enabling comparisons such as 'this month against last month' to be made.

Liberty 310 is highly resistant to magnetic fields and electrostatic discharge (ESD), making it ideally suited to aggressive environments, particularly where revenue protection (RP) is a concern.



## **Application**

- Domestic prepayment
- Prepayment for small and medium enterprises (SME)
- Landlord/tenant prepayment for residential and office complexes

## **Benefits**

- Increased customer satisfaction and retention through provision of useful information
- Reduced call-out costs: no disconnections overnight or at weekends
- Reduced financial losses as consumers cannot accrue large debts
- Minimal infrastructure cost: no need for keys or cards for vending
- Maximum flexibility through flexible tariffs and debt recovery
- Assists in reducing energy consumption and associated carbon dioxide emissions

## **Features**

- RJ-11 connection to the In-home Display, powered by the meter
- Support for slab or time-of-use (TOD) tariffs with up to 8 rates
- Emergency credit facility to assist consumers manage their accounts
- Friendly credit facility to prevent disconnection during unsocial hours
- Vending system supports debt recovery and load limiting

# Liberty 310

## Technical specifications

### Electrical

Connection type	Direct connected
Wiring configuration	3-phase 4-wire
Voltage range	240 V (L-N), - 20% to +15%
Current range	5-30 A, 10-60 A, 20-100 A
Accuracy	Class 1.0
Mains frequency	50 Hz $\pm$ 5%
Burden	Voltage Circuit: < 1.5 W, 3 VA Current Circuit: < 1.0 VA

### Compliance

Standards	IEC 62055-31, IEC 62053-21, IEC 62052-11, IS 13779
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### Mechanical

Dimensions (W x H x D)	175 x 290 x 130 mm (with extended terminal cover)
Weight	3 kg (approx.)
Enclosure	Engineering plastic
Sealing	3 sealable screws on main cover, 2 sealable screws on terminal cover

### Environmental

Ingress protection	IP 53
Temperature	-10 °C to +60 °C (operating) -25 °C to +70 °C (storage)
Humidity	95% non-condensing

### Features

Tariff	Up to 8 rates (slab or time-of-use)
Maximum Demand	Up to 8 maximum demand registers
Load Survey	240 parameter/days with 30-minute integration period
Communication	PACT optical port for local communication RJ-11 port under terminal cover for In-home Display

\* Standards compliance and communication facilities depend on product variant.

Liberty+ is a single-phase token-less smart meter for pay-as-you-go and managed credit applications. Encrypted vend codes are used to transfer credit between the online vending system and the meter. Liberty+ maintains its own energy account, which supports multi-rate tariffs with features such as public holidays and 'friendly credit' periods.

The meter interfaces with an In-home Display (IHD), which provides real-time and historical information on consumption and accounting. Consumers can readily see how much energy they are using, how much it is costing (per hour), how much credit is left and how long it will last, based on the current rate of consumption. Liberty+ also provides historical data, enabling comparisons such as 'this month against last month' to be made.

Liberty+ is highly resistant to magnetic fields and electro-static discharge (ESD), making it ideally suited to aggressive environments, particularly where revenue protection (RP) is a concern.



### **Application**

- Domestic prepayment
- Prepayment for small and medium enterprises (SME)
- Landlord/tenant prepayment for residential and office complexes

### **Benefits**

- Increased customer satisfaction and retention through provision of useful information
- Reduced call-out costs: no disconnections overnight or at weekends
- Reduced financial losses as consumers cannot accrue large debts
- Minimal infrastructure cost: no need for keys or cards for vending
- Maximum flexibility through flexible tariffs and debt recovery
- Assists in reducing energy consumption and associated carbon dioxide emissions

### **Features**

- RJ-11 connection to the In-home Display, powered by the meter
- Support for slab or time-of-use (TOD) tariffs with up to 8 rates
- Emergency credit facility to assist consumers manage their accounts
- Friendly credit facility to prevent disconnection during unsocial hours
- Vending system supports debt recovery and load limiting

## Technical specifications

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### Electrical

Connection type	Direct connected
Wiring configuration	1-phase 2-wire
Voltage range	240 V (L-N), - 20% to +15%
Current range	10-60 A, 20-80A
Accuracy	Class 1.0 for active energy
Mains frequency	50 Hz $\pm$ 5%
Burden	Voltage Circuit: < 1.5 W, 3 VA Current Circuit: < 0.5 VA

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### Compliance

Standards	IEC 62055-31, IEC 62053-21, IEC 62052-11, IS 13779
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### Mechanical

Dimensions (W x H x D)	158 x 245 x 120 mm (with extended terminal cover)
Weight	2 kg (approx.)
Enclosure	Engineering plastic
Sealing	2 sealable screws on main cover, 2 sealable screws on terminal cover

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### Environmental

Ingress protection	IP 53
Temperature	-10 °C to +60 °C (operating) -25 °C to +70 °C (storage)
Humidity	95% non-condensing

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### Features

Tariff	Up to 8 rates (slab or time-of-use)
Maximum Demand	Up to 8 maximum demand registers
Load Survey	180 parameter/days with 30-minute integration period
Communication	PACT optical port for local communication RJ-11 port under terminal cover for In-home Display

\* Standards compliance and communication facilities depend on product variant.