Liberty prepayment metering system is essentially a 'pay as you use' system. It offers a flexible and secure revenue management system to deliver a bill-less revenue cycle. Liberty meters have built-in tamper features to counter the fraudulent customers and reduce revenue losses. It provides convenient payment options to the consumer and eliminates all the hassles associated with a post paid system.



#### **Benefits**

- · Cost effective 'pay as you use' system
- Reduces billing cost
- Advance receipt of payment
- Improved cash flow
- Automatic tariff implementation
- Handles Complex Tariffs
- Energy consumption display in monetary terms
- · Client-Server based vending system
- User configurable alarms

#### **Features**

- Accuracy class 1.0
- · Flexible tariffs -
  - Time of Use (TOU)
  - Slab tariff
  - Minimum charges
  - Standing charges
  - Taxes and duties
  - Debt recovery
- Load limiting and management
- No disconnection on holidays, weekends and at night
- Option for Consumer Display Unit-Freedom
- Keypad based easy to use technology
- Authenticated Billing Codes (ABC) enables two way communications



## Liberty range





Liberty 1P, a single phase prepayment meter, with its associated system helps in effective revenue management. This system reduces billing costs by eliminating the meter reading, bill generation and bill distribution activities. The utility benefits from advance receipt of payment, improved cash flow and automatic tariff implementation.



## Liberty 3P

Liberty 3P, a three phase multifunctional prepayment meter provides convenient payment options to the consumer and eliminates all the hassles associated with post paid system. Liberty 3P meters have built-in advanced tamper detection features to counter fraudulent customers and reduce revenue losses.



### Liberty Dual Register Meter

Liberty Dual Register prepayment meter is a smart, integrated meter for measurement of both mains and DG supply. It serves requirement of the consumers with full and partial power back up from DG supply. Meter distinguishes the source of supply and deducts the amount according to respective tariff.



Liberty 1P, a single phase prepayment meter offers a flexible and secure revenue management system to deliver a bill-less revenue cycle. It provides convenient payment options to the consumer and eliminates all the hassles associated with a post paid system. Liberty prepayment metering system is designed to suit customised requirements and consumer acceptance.



#### Features and Benefits

- Accuracy class-1.0
- Cost effective online 'pay as you use' system
- · Load limiting and load management
- Highly secure multiple encryption data handling
- Option for remote consumer display unit -Freedom, allowing consumers to enter credit and access meter information
- · Flexible tariffs -
  - Time of Use (TOU)
  - Slab tariff
  - Minimum charges
  - Standing charges
  - Taxes and duties
  - Debt recovery

- Displays electricity usage in terms of money like load cost per hour and monthly consumption data
- Enables tariffs updates using the vend code
- · Enables refund of balance amount
- Client-Server based vending system
- User configurable alarms
- · No disconnection on holidays
- Starburst LCD for user friendly display
- Keypad based easy to use technology
- Authenticated Billing Codes (ABC)enables two way communications for bringing data back to the utility
- Advanced tamper detection



## Liberty 1P

## **Technical specifications**

E	lec	tri	-	-1

Connection type Direct connected

Wiring configuration 1 phase 2 wire

Voltage range 230/ 240 V (P-N), -30% to +30%

Current range 5(30)A, 10(60)A, 20(80)A

Metrological accuracy Class 1.0

Mains frequency 50 Hz  $\pm$  5 %

Burden As per relevant standards

Approvals

Standard compliance IS 13779, CBIP 88, IEC 62052-11, IEC 62053-21

Time Clock & Calendar

Normal power source Mains supply

RTC backup source Lithium Battery

Battery life (typical) 10 years

Min shelf life (typical) 3 years

Mechanical

Dimensions (WxHxD) 125x193x48 mm

Enclosure Engineering plastic

Sealing Sealing screw provision

**Environmental** 

Temperature -10 °C to +50 °C (operating) | -25 °C to +70 °C (storage)

Humidity Upto to 95 % non-condensing

Ingress protection IP 51

Insulation class As per IS 13779
Impulse withstand As per IS 13779

**Programming and Features** 

Tariff rates 8 rate registers

Data retention 10 years (minimum)

Communications Optical port



Liberty 3P, a three phase multifunctional prepayment meter, with its associated system helps in effective revenue management. It has built-in advanced tamper detection feature to counter fraudulent customers and reduce revenue losses.

Liberty prepayment metering system is designed to suit customised requirements and consumer acceptance. It provides convenient payment options to the consumer and eliminates all the hassles associated with a post paid system.



#### Features and Benefits

- · Accuracy class-1.0
- Cost effective online 'pay as you use' system
- Load limiting and load management
- Highly secure multiple encryption data handling
- Option for remote consumer display unit -Freedom, allowing consumers to enter credit and access meter information
- · Flexible tariffs -
  - . Time of Use (TOU)
  - Slab tariff
  - Minimum charges
  - Standing charges
  - Taxes and duties

- Displays electricity usage in terms of money like load cost per hour and monthly consumption data
- Enables tariffs updates using the vend code
- Enables refund of balance amount
- Client-Server based vending system
- User configurable alarms
- · No disconnection on holidays
- Starburst LCD for user friendly message display
- Keypad based easy to use technology
- Authenticated Billing Codes (ABC)enables two way communications for bringing data back to the utility
- · Advanced tamper detection



# Liberty 3P

## **Technical specifications**

Electrical

Connection type Direct connected
Wiring configuration 3 phase 4 wire

Voltage range 230/ 240 V (P-N), -30% to +30%

Current range 5(30)A, 10(60)A, 20(80)A

Metrological accuracy Class 1.0

Mains frequency 50 Hz  $\pm$  5 %

Burden As per relevant standards

Approvals

Standard compliance IS 13779, CBIP 88, IEC 62052-11, IEC 62053-21

Time Clock & Calendar

Normal power source Mains supply

RTC backup source Lithium Battery

Battery life (typical) 10 years

Min shelf life (typical) 3 years

Mechanical

Dimensions (WxHxD) 175 x 264 x 96 mm

Enclosure Engineering plastic

Sealing Sealing screw provision

**Environmental** 

Temperature -10 °C +50 °C (operating) | -25 °C to +70 °C (storage)

Humidity Upto to 95 % non-condensing

Ingress protection IP 51

Insulation class As per IS 13779
Impulse withstand As per IS 13779

**Programming and Features** 

Tariff rates 8 rate registers

Data retention 10 years (minimum)

Communications Optical port



Liberty Dual Register prepayment meter is a smart, integrated meter for measurement of both mains and DG supply. It offers a flexible and secure revenue management system to deliver a bill-less revenue cycle. It provides convenient payment options to the consumer and eliminates all the hassles associated with a post paid system.

Meter automatically distinguishes the current source of supply by detecting the signal either with supply frequency (PLC based) or a separate digital input. The amount will be deducted according to respective tariff.



#### Features and Benefits

- Accuracy class-1.0
- Cost effective online "pay as you use" system
- Maintains individual consumption accounts of mains and DG supply
- Highly secure mutiple encryption data handling
- Option for remote consumer display unit -Freedom, allowing consumers to enter credit, access meter information and DG supply ON indication
- · No disconnection on holidays
- · Flexible tariffs -
  - Time of Use (TOU)
  - Slab tariff
  - Minimum charges
  - Standing charges
  - Taxes and duties
  - Debt recovery

- Displays electricity usage in terms of money like load cost per hour and monthly consumption data
- Enables tariffs updates using the vend code
- · Enables refund of balance amount
- Client-Server based vending system
- User configurable alarms
- Starburst LCD for user friendly message display
- Keypad based easy to use technology
- Authenticated Billing Codes (ABC)- enables two way communications for bringing data back to the utility
- · Advanced tamper detection
- Different load limiting and load management for mains and DG supply



## Liberty Dual Register meter

## **Technical specifications**

Electrical

Connection type Direct connected

Wiring configuration 1 phase 2 wire & 3 phase 4 wire

Voltage range 230/240 V (P-N), -30% to +30%

Current range 5(30)A, 10(60)A, 20(80)A

Metrological accuracy Class 1.0

Mains frequency 50 Hz  $\pm$  5 %

Burden As per relevant standards

**Approvals** 

Standard compliance IS 13779, CBIP 88, IEC 62052-11, IEC 62053-21

Time Clock & Calendar

Normal power source Mains supply

RTC backup source Lithium Battery

Battery life (typical) 10 years

Min shelf life (typical) 3 years

Mechanical

Dimensions (WxHxD) 125 x 193 x 48 mm for 1 Phase | 175 x 264 x 96 mm for 3 Phase

Enclosure Engineering plastic

Sealing Sealing screw provision

**Environmental** 

Temperature -10 °C +50 °C (operating) | -25 °C to +70 °C (storage)

Humidity Upto to 95 % non-condensing

Ingress protection IP 51

Insulation class As per IS 13779

Impulse withstand As per IS 13779

**Programming and Features** 

Tariff rates 8 rate registers

Data retention 10 years (minimum)

Communications Optical port

