



# IVORY

## Electricity Meter



## Integrated Single-Phase Electricity Meter

The Ivory Integrated Single Phase electricity meter is a common base mounted Class1 ISP pre-payment meter. Building on Enlight's existing product design, the Ivory ISP is an affordable meter to meet the requirement of low-cost installations and low power users. It is available from 20A to 80A to meet a variety of demands.

The meter is rated at 230V (80A) with an operating temperature range of -15 °C to +55 °C with Class 1 active energy accuracy.

The meter is configurable for either STS pre-payment or post-payment operation. It incorporates a tamper detection and disconnection feature.

The large LCD display has language independent icons indicating the meter status. A low credit threshold function notifies the user of a low credit condition by audible alarm and indication on the LCD. The keypad incorporates braille features for the partially sighted.

Customer focused short codes are available to assist managing power consumption by, for example, displaying total kWh consumed or the instantaneous power or up to the last 7 credit tokens accepted by the meter as well as the consumption over the last 24 hours and 30 days of operation.

Short codes to display voltage, current, frequency and power as well as the tamper switch state improve the installation and maintenance technician's ability to ensure correct meter installation.

### KEY BENEFITS

- Large LCD display with language independent icons indicating the meter status.
- Keypad with braille incorporated features for the partially sighted.
- Low credit notification by audible alarm and indication on the LCD.
- Pre-payment and post-payment operating modes are available.
- Quality of supply Over and Under states for voltage, frequency and power monitored.

## PRIMARY STANDARD COMPLIANCE

IEC 62055-21	Electricity metering – Payment systems – Part 21: Framework for standardization
IEC 62055-31	Particular Requirements - Static Payment Meters for active energy (Classes 1 and 2)
IEC 62055-41	Part 41: Standard Transfer Specification (STS) – Application Layer protocol for one-way token carrier systems
IEC 62055-51	Part 51: Standard Transfer Specification (STS) – Physical Layer Protocol one-way numeric and magnetic card token carriers
IEC 62055-52	Part 52: Standard Transfer Specification (STS) – Physical Layer Protocol for a two-way virtual token carrier for direct local connection
SANS 1524-1	SANS Electricity Payment Systems – Part 1: Payment meters
DSP 34-1635	ESKOM – Particular Requirements for Pre-payment meters
240-76619489	ESKOM – ALT Testing
IEC 62052-11	General Requirements, tests and test conditions — Part 11: Metering Equipment
IEC 62053-52	Electricity Metering Equipment (AC) — Part 52: Symbols

### SPECIFICATIONS

User Display	LCD to 8 digits values & language independent icons
User Interface	Keypad incorporating braille features
Visual Indicators	Rate, Relay Status, Status LEDs, LCD with language independent icons
Rate Indicator	1000 imp/kWh
Metering/Payment Modes	Pre- and post-payment fully STS compliant
Disconnections	Zero Credit, Tamper, Reverse Energy, Over and Under Voltage, Over and Under Frequency, Over Power Limit
Tamper	Magnetic. Detection of unit removal from the socket. Reverse Energy Detection
Communication Option	Optical port (IEC 62055-52), PLC
Voltage Range	Un = 220V / 230V / 240V, 50Hz (80 % Un to 115 % Un)
Frequency	50Hz +/- 2 %
Current range	I <sub>b</sub> =5A, I <sub>max</sub> = 80A
Accuracy	Active Energy Class 1
Power supply and consumption	Power consumption less than 2W and 10VA.
Temperature Operating Range	-15 °C to +55 °C
Humidity Operating Range	<95 % RH
RF Immunity	30V/m
Sealing	Meter enclosure sealed for life with terminal seal provision.
Product Reliability	Designed for a 15yr lifespan in the field
IP Rating	Common base IP52
Mounting Configuration	Integrated common base

### DIMENSIONS (mm)

