

# PRODUCT BROCHURE

AFRIKA SMART UTILITIES  
(PTY) LTD



Company Registration: 2017/318911/07

## Introduction

Afrika Smart Utilities (Pty) Ltd has been appointed as a distributor of Linyang Prepaid and Post Paid electricity products to the Southern African electricity industry. All products have been tested and certified by the SABS and STS Association as STS6 products.

### LOCAL DISTRIBUTION

Afrika Smart Utilities holds stock (on average 2500 units per prepaid line item) on all products which include Single and Three Phase Integrated and PLC Split meters, Data Concentrators and Three Phase 3 and 4 Wire CT/DC AMR meters. We can have the order ready for collection within 5 (five) working days. The product has been distributed to several private utilities and municipalities and proven to operate with any STS (both legacy and STS6) prepaid electricity vending system in Southern Africa.

### SUPPORT

Afrika Smart Utilities has created an easy to use manual for every meter this will help the electrician install the meters speedily, should there be technical failures the support team lead by a qualified electrical engineer will visit the respective site and help resolve the issues. Also available is a 24x 7 x365 Whatsapp and cellphone contact this will help resolve any issues experienced by the user or the installer within minutes of the request be raised.

### WARRANTY

All products are supplied with a 12-month warranty and should there be manufacturing issues with any product it will be replaced within 2(two) working days. Please note in the case of batch failures Afrika Smart will replace all meters.

### METER CONFIGURATION AND SUPPLY GROUP CODES

Afrika Smart can either register your Supply Group Code (SGC) on its vending system to generate key change tokens ( KCT) to configure the meters on your SGC alternatively we can program the meters to default SGC of 999907 and you can provide the KCT from 999907. This default process has worked well thus far as customers preregister the meters on the vending system reducing administration and activation delays. Also, note that all meters can be set from 20amp to 80amp on a required tariff index.

### AMI/AMR SMART METERING

Afrika Smart Utilities has its own AMI/AMR system supported by Linyang and is available for customers that do not have their own AMI/AMR. All smart metering products are DLMS/COSEM and

IDIS certified hence the protocols can be provided should you wish to integrate with all single and three-phase metering products. Linyang has also provided its meter and DCU protocols to SDG Technologies and is available on the PNPSCADA AMI/AMR System.

# OUR PRODUCTS

# SM120

## DIN-Rail Smart Single Phase Prepaid Meter

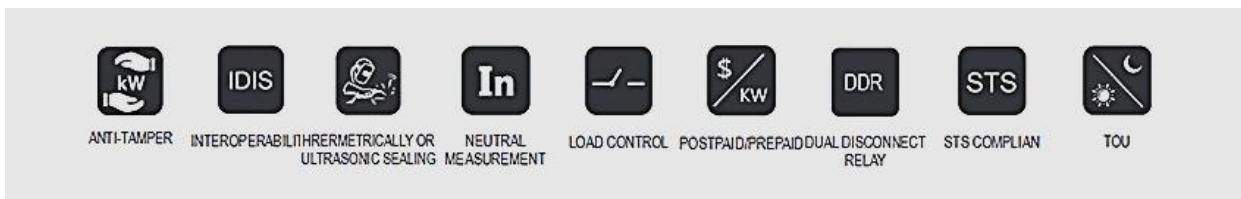
### Key Features

- Anti-tamper
- STS-Certified
- Postpaid/ Prepaid
- DLMS/ COSEM IEC Standard
- SABS Certified
- AMI Capability
- Compact Design



DIN-Rail series are residential split type prepaid electricity meters, with conventional and smart options. They can be configured in Prepaid or Postpaid mode and provide utilities with a high degree of accuracy and reliability, allowing for single-phase connection.

These DIN-Rail meters are designed based on 20-bit Token in accordance with STS specifications, fully complying with DLMS/COSEM IEC standards and certified with DLMS, STS, SABS certificates, and the compact construction design makes it possible to install them in a cluster box with various capacities of 1, 2, 5, 10, etc. meters. Their robust anti-tampering and prepayment functions make them ideal low-cost devices for revenue collection and protection solutions.



# SM150 Keypad prepaid

## Smart Keypad base Single Phase Prepaid Meter



### Key Features

- Anti-tamper
- Integrated keypad
- Prepaid
- DLMS/ COSEM IEC Standard
- IDIS/MID Certification
- STS-Certified
- SABS Certified
- AMI Capability

LY-SM150 prepaid meters are advanced AMI smart single-phase electricity meters, with BS integrated keypad/Smart Card type and/or split keypad type

options. They can be configured in Prepaid or Postpaid mode. Their unique feature of plug-and-play communication module creates the possibility of exchange and usage of a variety of reliable wired & wireless communication interfaces, suitable for residential and small size C&I clients.

LY-SM150 prepaid series meters are accurate at measuring & monitoring load and network parameters as well as anti-tampering functions, making them ideal for revenue collection and protection solutions. They are designed based on 20-bit Token in accordance with STS or CTS specifications, fully complying with DLMS/COSEM, IDIS standards and certified with DLMS, MID, IDIS, STS, SABS certificates to guarantee their interoperability over AMI platform.



# SM150 postpaid

## Smart Single Phase Meter



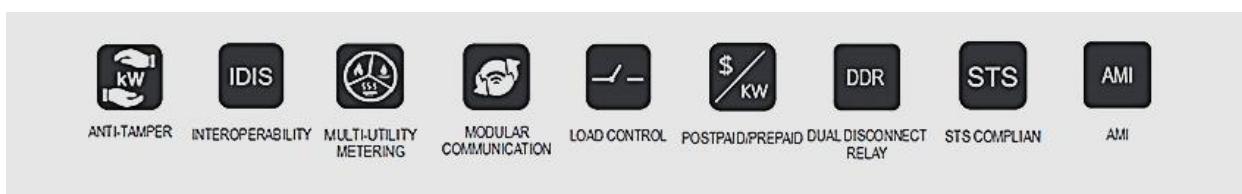
### Key Features

- Anti-tamper
- Plug-and-play
- Communication Module
- DLMS/ COSEM IEC Standard
- IDIS/MID Certification
- STS-Certified
- SABS Certified
- AMI Capability

LY-SM150 postpaid meters are advanced AMI smart single phase meters, with a unique feature of the plug-and-play communication module, creating the possibility of exchange and usage of a variety of reliable wired & wireless communication interfaces, suitable for residential

and small size C&I clients.

LY-SM150 postpaid meters are accurate at measuring & monitoring load and network parameters as well as anti-tampering functions, making them ideal for revenue collection and protection solutions. They are designed fully complying with DLMS/COSEM and IDIS standards and certified with DLMS, MID, IDIS certificates to guarantee their interoperabilities over the AMI platform.



## SM350 Keypad prepaid

### Smart Keypad base Three Phase Prepaid Meter



#### Key Features

- Anti-tamper
- Prepaid
- Integrated Keypad
- DLMS/ COSEM IEC Standard
- IDIS/MID Certification
- STS-Certified
- SABS Certified
- AMI Capability

LY-SM350 prepaid series are advanced AMI smart three phase prepaid electricity meters, with BS integrated keypad/Smart Card type and/or split keypad type options, they can be configured in Prepaid or Postpaid mode. Their unique feature of

plug-and-play communication module creates the possibility of exchange and usage of variety of reliable wired & wireless communication interfaces, suitable for residential and small size C&I clients. LY-SM350 prepaid series meters are accurate at measuring & monitoring load and network parameters as well as anti-tampering functions, making them ideal for revenue collection and protection solutions. They are designed based on 20-bit Token based STS or CTS specifications, fully complying with DLMS/COSEM, IDIS standards and certified with DLMS, MID, IDIS, STS, and SABS certificates to guarantee their interoperability over AMI platform.



# SM350 postpaid

## Smart Three Phase Meter



### Key Features

- Anti-tamper
- Plug-and-play Communication Module
- DLMS/ COSEM IEC Standard
- IDIS Certification
- STS-Certified
- SABS Certified
- AMI Capability

SM350 postpaid meters are advanced AMI three-phase meters, with a unique feature of the plug-and-play communication module, creating the possibility of exchange and usage of a variety of reliable wired & wireless communication interfaces, suitable for residential and small size C&I clients.

LY-SM350 postpaid series meters are accurate at measuring & monitoring load and network parameters as well as anti-tampering functions, making them ideal for revenue collection and protection solutions. They are designed fully complying with DLMS/COSEM and IDIS standards and certified with DLMS, MID, IDIS certificates to guarantee their interoperability over the AMI platform.



# SM300CT

## Smart Three Phase Indirect Meter (CT Operated)



### Key Features

- Anti-tamper
- Plug-and-play Communication Module
- DLMS/ COSEM IEC Standard
- IDIS Certification
- STS-Certified
- SABS Certified
- AMI Capability

LY-SM300-CT are advanced AMI indirect three-phase electricity meters that provide utilities with high accuracy of class 0.5s/0.2s and high reliability, applicable to various C&I clients as well as substation metering. They are featured with robust functions including measuring & monitoring load and network

parameters over multi-range voltage and current ranges, enhanced power quality monitoring as well as THD measuring, etc., which empower utilities and private industries easily and accurately monitor their power networks.

The modular design of LY-SM300-CT provides a variety of reliable wired & wireless communication interface options. They are certified by MID, DLMS/COSEM and IDIS to guarantee a reliable and interoperable metering platform for the AMI system.



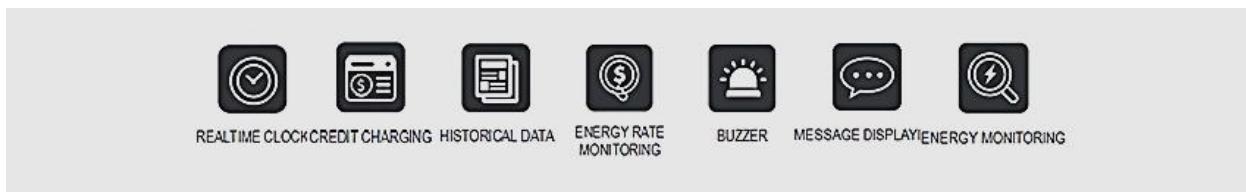
## CIU (Customer Interface Unit)



### Key Features

- Large LCD with backlight
- Keypad buttons with backlight
- PLC/ M-Bus Communication option
- Interface unit for prepayment meter
- Access functions like credit charging, Balance alarming, History of Tokens, Real-time energy consumption, etc.

CU100 is a user-friendly Customer Interface Unit (CIU) applicable to conventional and smart prepayment meters. CU100 can communicate with prepaid meters through wired (PLC/M-Bus) or Wireless (RF-LoRa) communication options, providing a reliable and free interface to end-user customers, which makes them possible to access to different functions and data, e.g. credit charging, credit balance alarming, history of tokens, real-time energy and demand values, friendly mode, emergency mode, etc. CU100 is equipped with a large LCD, and big keypad buttons, adjustable buzzer and the backlight for both LCD and keypad



# Data Concentrator

## LY-DC12



LY-DC12 is an advanced data concentrator equipped with a strong processor chipset, large data storage capability, and optional LCD; it also supports accurate metering functions, and transformer monitoring system. Its modular design provides a variety of reliable wired & wireless uplink and downlink communication channels addressing a secure and future-proof data transaction platform. This range of communications can be a local physical port like IR, RS232, RS485, USB and remote downlink PLC, RF or NB-IoT communications as well as GPRS/3G/4G/Ethernet uplink channels.

LY-DC12 is designed fully complying with DLMS/COSEM and IDIS standards to easily and securely provide interoperability over different worldwide metering and system vendors.

### Key Features

- Data Collection like demand data reading, day data reading, profile data reading, etc.
- Data Storage of 900 PLC meters
- Data Recopy
- Time Hack Function
- Onsite Copying Function through optical ports
- Supports RS485
- DLMS/ COSEM IEC Standard

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transformer monitoring system. Its modular design provides a variety of reliable wired & wireless uplink and downlink communication channels addressing a secure and future-proof data transaction platform. This range of communications can be a local physical port like IR, RS232, RS485, USB and remote downlink PLC, RF or NB-IoT communications as well as GPRS/3G/4G/Ethernet uplink channels.

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