VC1000 BS

Integrated Keypad Prepaid Meter

Single-phase prepaid metering for secure, efficient and sustainable utility operation



PRODUCT OVERVIEW

VC1000 integrated keypad prepaid meter helps utility operation become easier, efficient and sustainable.

IEC COMPLIANT

IEC 62052-11, IEC 62053-21, IEC 62053-23 and IEC 62055-31

PREPAYMENT READY

20-digit token entry, low-balance alerts and emergency / friendly mode

FLEXIBLE COMMS

Optical, RS485, wired M-bus and optional built-in communication channels

VC1000 Integrated Keypad Prepaid Meter

Standard

- Compliance with IEC standards (IEC 62052-11, IEC 62053-21, IEC 62053-23 and IEC 62055-31).

Product Features

- Compatible with current and future communication technologies.
- Sealable optical port.
- High bandwidth by dual modules.

Sustainability

- Upgrade from traditional to smart meter without any extra investment.
- High-efficient and self-adaptive communication module for harsh environments.

Measurements

- Two-way energy measurements.
- Active energy and power, reactive energy and power, apparent energy and power, four-quadrant energy and power, plus instantaneous voltage, current, power factor, frequency and power.
- Three auxiliary output terminals for electric pulse (kWh, kvarh, CLOCK).
- Up to 12 months billing data registers.

Prepaid Functions

- Prepaid/postpaid mode switchable.
- 20-digit transmission as a token; customer purchases energy before consumption through the keypad.
- Low-balance alert by audible and lamp indication.
- Supports emergency and friendly holiday mode.
- STS/CTS mode switchable.

Anti-tamper

- Detection of meter cover, terminal and communication-module cover opening, bypass, etc.
- External magnetic-field detector and magnetic immunity.

Communication

- IEC 62056-21 compliance.
- Remote/local firmware upgrade for meter and communication-module firmware.
- Six independent communication interfaces including optical port, 1x RS485, 1x wired M-bus and optional built-in communication channels with UIU.



Technical Specifications

Description	Value
Nominal Voltage	230V
Voltage Range	0.5Un ~ 1.3Un
Current	5(80)A
Frequency	50Hz / 60Hz
Accuracy Class	Active Energy: CL 1.0 - 1000 imp/kWh Reactive Energy: CL 2.0 - 1000 imp/kvarh
Standard	Fully compliant with IEC 62052-11, IEC 62053-21, IEC 62053-23 and IEC 62055-31 standards (mechanical, climatic, electrical, electromechanical and metrological).
Real-time Clock Accuracy	<3 min/year or <0.5 s/day
Environment	Temperature range: -25 C to +75 C Humidity: up to 95%
Ingress Protection	IP54
Communication Interface	Optical port (IEC 62056-21) RS485 / PLC / RF Protocol (IEC 62056)

Accessories

Communication	Supporting external telephone modem; cabling for external communication devices; IR-reading device for connection to PC.
Configuration	PC software for configuration and data reading.
Installation Tool	Sealing kit.
Documentation	User manual.