

# LoRaWAN Single Phase Prepaid Energy Meter (CL710K22)



The CL710K22 is a single-phase smart energy meter certified by both MID and DLMS/COSEM for high accuracy and stable performance. With a LoRaWAN communication module, it allows for remote billing, configuration, credit purchases, and alarm event uploads from a central server. It supports both prepayment and post-paid options, and can detect tampering and cut off power supply when necessary. Equipped with tamper detection and magnetic immunity features, an integrated relay allows for secure remote connection and disconnection of consumer electricity supply.

## LoRa Radio Parameters

Communication Protocol	LoRaWAN
LoRa MAC Version	1.0.3
Device Type	Class A/C
Network Registration Way	OTAA, ABP
LoRaWAN Uplink Confirmation	Confirm or Partially Confirm
LoRa Chip	STM32WLE5CCU6
MCU	Arm® 32-bit Cortex®-M4
Memory	256KB Flash; 64KB RAM
ISM Bands	AS923,AU915,EU868
TX Power	Up to 22dBm
Uplink Channels	8 settable channels with bandwidth of 125kHz
RX Sensitivity	Down to -125dBm@BW = 125 kHz, SF = 7
Spreading Factor	SF7~SF10 (Adaptive)
LBT(Listen Before Talk)	Yes
Report Interval	Configurable via Downlink Commands
Data Cach when LoRa Network Interrupt	Yes
Data Logger in local device	Optional
Communication Distance	3km to 10km (Eyesight distance in open space)
Built-in Valve/Relay	Relay
Anti-tampering	Yes



# LoRaWAN Single Phase Prepaid Energy Meter (CL710K22)

## Electrical Parameters

Connection Wiring	1P2W LNNL (BS) / LLNN (DIN) 1P3W L1L2 L2L1 / L1L1 L2L2
Nominal Voltage	120V ~ 240V (AC)
Operating Voltage range	70% ~ 130% Un
Basic Current	5A
TX Current	≤127mA @ 22dBm
Maximum Current	40A, 60A, 80A, 100A
Starting Current	4%Ib / 20mA
Frequency	50 Hz and 60 Hz ± 5%
Accuracy kWh/kVarh	Class 1 / Class 2(IEC), Class B(MID)
Pulse Constant	1000 imp / kWh, 1000 imp/kVarh
Power Consumption Voltage Circuit	≤0.75W; ≤1.75VA
Power Consumption Current Circuit	≤0.1VA
Max power consumption in voltage circuit with PLC module	3.2W