Joymeter

Make It Easy

JOY121MP

Single Phase DIN-Rail Prepaid Electricity Meter

Split PLC Prepaid Electricity Meter

Joymeter JOY121
1000imp/kWh
COM
STS-437

JOY121MP 2015
5(100)A 240V~60Hz
IEC62055-31 Cl.1 IP51
51 9503 0175 7
Infrared

CE MID | KEMA | LoRa | STS ASSOCIATION | TUV SUD | dlms COSEM Compliant | OMS | CMS | ISO ISO9001 | M-Bus wireless

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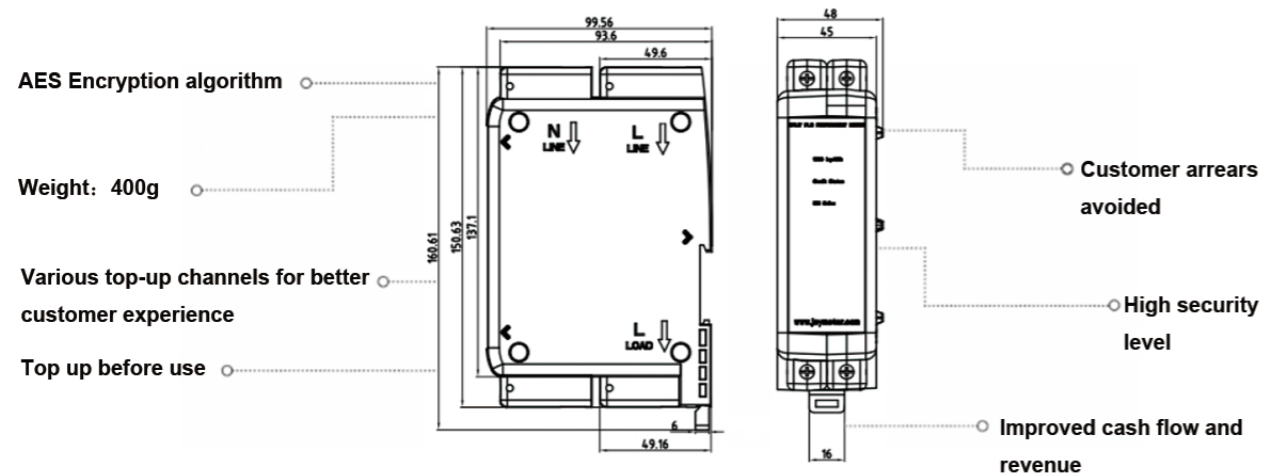# JOY121MP Single Phase DIN-Rail Prepaid Electricity Meter

DESCRIPTION

JOY121MP, a DIN-Rail prepaid meter, consists of two parts, MCU (Metering Control Unit) and CIU (Customer Interface Unit).

The MCU can be installed outside the house in a meter box and communicates with the CIU via Power Line Carrier, while the CIU is installed in customer's house. The PLC communication uses existing household wiring and does not require additional wiring to the consumer's house.

FEATURES

- No-load protection
- Magnetic interference detection
- Improved sealing against ingress of insects
- Significant Reverse Energy (SRE) detection
- Easy switch between prepayment and post-payment option
- Optional configuration: JOY121MP+ CIU1 (PLC communication)
- Automatic diagnosis of various faults includes contactor fault, memory devices fault, etc.

- STS compliant
- Open cover detection
- Over load protection

AES Encryption algorithm

Weight：400g

Various top-up channels for better customer experience

Top up before use

Customer arrears avoided

High security level

Improved cash flow and revenue

TECHNICAL SPECIFICATIONS

Item		Parameter
Nominal Voltage		120/220/230/240V
Operating Range		70% to 130% of Un
Frequency Range		50/60Hz
Base Current (Ib)		5A/10A
Max Current (Imax)		100A
Constant		1000 imp/kWh
Accuracy		Class 1
Starting Current		4‰Ib
Max Withstand Voltage		420V (48hr)
Insulation Classification		Double insulation
Insulation Level		4kV rms for 1 minute
Voltage Circuit		≤ 2W/10VA
Current Circuit		≤ 1.0VA@Ib
Electrostatic Discharge		16kV air discharge; 10kV contact discharge
Immunity to Fast Transient Burst		4kV
Surge Immunity		4kV or 6kV alternative
User Interface(On CIU)		12 keys, international outlay standard with 0-9 numeric key, backspace and enter key
External Interface		Optical port
Disconnection Device		Internal Contactor
Terminal Type		Moving Cage
Maximum Cable Size		Φ8.5 mm
LED Indicator		Pulse LED: 1000 imp/kWh
		Credit LED: low credit alarm with blinking
		Communication LED
Communication With CIU		PLC
		Distance: over 200m
Installation		MCU:DIN Rail mounted
		CIU: Wall mounted
Product Life		15 Years
		Data retained over 20 years
Operating Temperature		-30°C - 60°C
Storage Temperature		-40°C - 70°C
Relative Humidity		≤ 95%;annual mean 75%
IP Rating		IP51
Standard Compliance	Meter Standard	IEC 62052-11, IEC62053-21, IEC 62055-31
	Communication Standard	IEC62055-41, IEC62056-21