

EGO700-L IoT Multifunction Power Meter





4G / LoRa Wireless Communication



P2P Remote Configuration & Free Maintenance



Multiple Platform Transmission



Data Cache & Retransmit

EGO700-L IoT Multifunction Power Meter

Feature

Combine Measuring and Electricity Monitoring Into One

- Full Parameter Measuring and Power Quality Monitoring
- Measure and alarm for cable temperature

Reliable Data Transfer

- 7 days Data Cache & Retransmit
- 10 sec. keep working to posting POWER-OFF alarm
- 1 sec. real-time data upload

Multiple Communication Protocol

- 4G / LoRa / RS485/ LAN
- Modbus RTU, Modbus TCP, HTTP, MQTT, IEC104, DLMS*, Bacnet*

(Marked * is available for customized model)

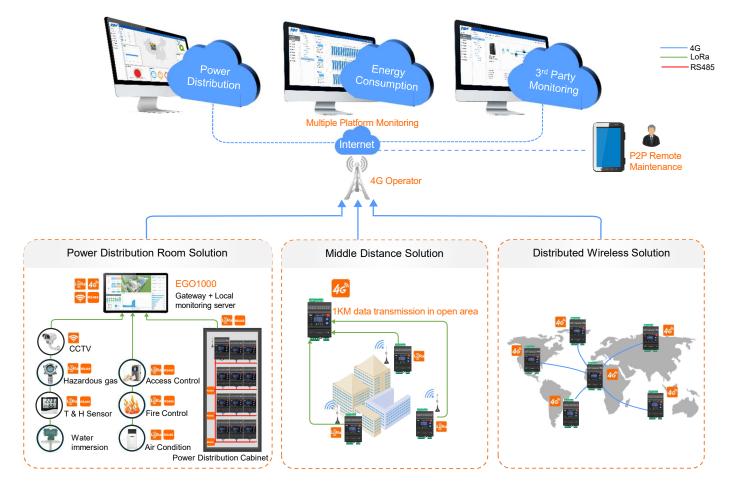
Remote Support and Engineering Simplification

- P2P remote configuration & free maintenance
- Phase-sequence auto adjustment
- Split core CT for easy installtion

System Structure







EGO700-L IoT Multifunction Power Meter

Function

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Measurememt

- voltage, current, active power, reactive power, apparent power, power factor, frequency, active energy, reactive energy , apparent energy, voltage and current phase angle, cable temperature, switch detection

- Latest 10 years, 12 months, 31 days historical energy

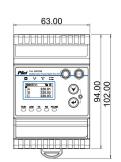


Communication

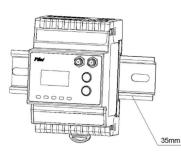
Standard 1 RS485, 4G / LoRa/ LAN optional
Support Modbus RTU, Modbus TCP, HTTP, MQTT, IEC104, DL/T645-2007 communication etc (DLMS, Bacnet is available for customized model)
Register is definable, support break-point transfer

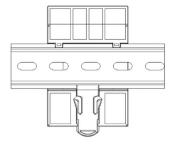
Dimension and Installation

Unit: mm









Technical Specification

Power Supply	AC 85~265V Or DC 100~300V	LTE Wireless Communication	LTE-FDD B1/B3/B5/B8 LTE-FDD B34/B38/B39/B40/B41	
		LoRa	470-510Mhz, 1KM open area (customized model is 915Mhz)	
Rated Current	1A or 5A, 5A/1.67mA CT (optional) 100A/33.3mA CT (optional)	RS485	4800-38400bps, Modbus-RTU	
		LAN port	Modbus TCP/IP , 10M/100M Ethernet (customized model)	
Rated Voltage	3x57.7/100V, 3x220/380V	Break-point transfer	7 days data cache (1 sampling point / 5min.)	
Digital Input	Wet contact, external power supply: 220V, when <60V, open, when>140V, closed, Max. Input: 300V Or Dry contact: internal supply 24Vdc	Environment	Operation Temperature: -25°C∼+70°C Storage Temperature: -40°C∼+85°C Operation Humidity: 5% ~ 95% Non-condensing	
Relay output	Node capacity: 250Vac/ 5A		Electrostatic Discharge Immunity TestIEC61000-4-2:2001RF Electromagnetic Field Immunity testingIEC61000-4-3:2002Electrical fast transient immunity testIEC61000-4-4:2006Surge immunity testIEC61000-4-5:2005	
Connection Mode	3 Phase 4 Wire 3 Phase 3 Wire	EMC Standard		
Cable Temperature	4 channels of NTC sensor, range: 0-149℃		Injected Current Immunity TestIEC61000-4-6:2006Electromagnetic emission limitCISPR22: 2006Voltage sag and short-time interruption Immunity testingPassed	



Power Quality Analysis

Three phase voltage/current, 63rd harmonic analysis, voltage/current unbalance



Demand Calculation

- Maximum and real-time demand of power and current
- Real-time demand, daily and monthly max. demand



Setpoint Alarm

Support alarming of over-voltage, under-voltage, over-current, under-current, lost phase, power over limit, over temperature, and power failure with SOE time record.

Parameter	Measurement Range	Accuracy	
Voltage	Phase Voltage: 10V~400V Line Voltage: 10V~690V	0.2%	
Primary Voltage	Max. 1000kV	-	
Current	5mA~6.5A	0.2%	
Primary Current	Max. 100000A		
Frequency	40~65Hz	0.1%	
Active Energy	0~99999999.9 kWh	0.5%	
Reactive Energy	0~999999999999999999999999999999999999	2%	
Active Power	Single Phase: 0 ~ \pm 9999MW/Mvar	0.5%	
Reactive Power	Total: 0 ~ \pm 9999MW/Mvar	1.0%	
Harmonic Ratio	0%~100%	Class B	

Split core CT (optional)

Model		odel	Application	
	СТО	Hole diameter: 9mm	Applied to renovation project where already installed other CT	
	CTO100	Hole diameter: 15mm	Applied to renovation project where max. current ${<}100\text{A},$ installation without power off	

Order Information

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T	Power supply	P1	Aux. power supply AC 85~265V or DC 100~300V
		P2	Self-supply from voltage input L1
		Т	4 channels temperature measurement
	Optional function	SDR	2 digital input (dry contact) + 2 relay output
		SWR	2 digital input (wet contact) + 2 relay output
		СТС	Type for connecting with 5A or 1A CT
	Optional input current	СТО	Comes with split core CT 5A/ 1.67mA
		CTO100	Comes with split core CT 100A/ 33.3mA
		RS485	RS485
	Communication	LoRa	LoRa, RS485
		4G	Lte(4G), RS485
		All	Lte(4G), LoRa, RS485
		LAN	LAN, RS485 (customized)

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