

TECO
Advanced Automation

Saten
Security And Technology Engineering Network



Multifunction
Power Meter
Teco-300

MODBUS
INTERFACE

ENERGY
ACCURACY 0.5S

PULSE OUTPUT

Teco-300

Multifunction Power Meter

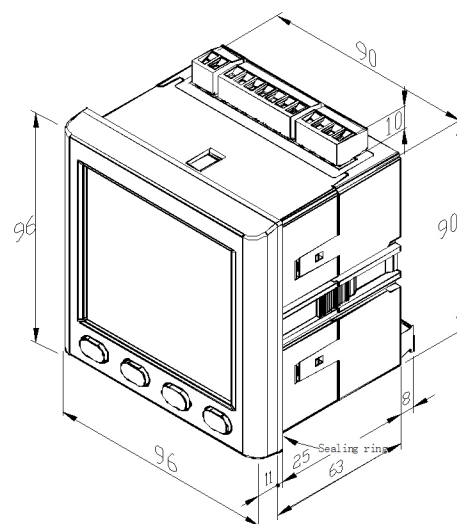
GENERAL

Multifunction power meter Teco-300 has the functions of electrical parameters measurement, TOU, power quality analysis, real-time grid waveform and phase measurement, SOE, load waveform, max/min value recording, demand statistical recording and harmonic measurement. It has RS485 communication interface supporting MODBUS-RTU protocol. It can be applied in power distribution systems and energy management systems.



FUNCTION

		Teco-300
Measurement	U, I, P, Q, S, PF, F	■
Energy measurement	Bidirectional energy	■
	Multi-rate energy	■
	Automatic meter reading	■
	Fundamental energy	■
	Harmonic energy	■
	Synchronous energy	■
	Spare energy	■
	Four-quadrant reactive energy	■
Demand recording	Record the demand of U, I, P, Q, S & PF with time marks, freezing the data of three months	■
Load line	Load line of U, I, P, Q, S & PF	■
SOE recording	Recording SOE changes of digital input and relay output status, resolution time 10mS, max 248 pieces	■
Data record	Timing record the parameters of voltage, current and energy.	■
Power quality	Voltage or current imbalance	■
	THD of voltage and current	■
	Percentage and bar graph of 2~39th harmonics	■
	Crest factor, K factor	■
Energy pulse	2 optoelectronic isolation outputs	■
Communication	RS485 interface, Modbus-RTU protocol	■



DIMENSION

TECHNICAL SPECIFICATION

Accuracy	Voltage, current: 0.2 class; active, reactive and apparent power: 0.5 class Frequency: ± 0.02 Hz; active energy: 0.5S class; reactive energy: 2 class		
Signal input	Wiring mode	Three phase four wire, three phase three wire, Single phase	
	Voltage	Rated value	400V(L-N)/690V(L-L)
		Overload	Continuous: 1.2 times of rated value Instantaneous: 2 times of rated value
		Power consumption	<1VA(per phase)
		Impedance	> 1M Ω
	Current	Rated value	1A/5A
		Overload	Continuous: 1.2 times of rated value Instantaneous: 10 times of rated value during 3 seconds
		Power consumption	< 0.4VA (per phase)
		Impedance	< 20M Ω
	Frequency	50Hz/60Hz	
Power supply	Operating range	AC(100-415)V / DC(100-350)V	
	Power consumption	< 10VA	
Electric energy pulse output		Optoelectronic isolation output, pulse width 80ms $\pm 20\%$ (> 5Hz, the duty cycle is 50%)	
Relay output		Capacity: AC250V5A or DC30V5A Isolation voltage 2500VAC	
Analog output		Accuracy: 0.5% Load resistance $R \leq 350\Omega$	
Digital input		Dry contact node Isolation voltage: 2500VAC	
Data recording		Interval time 1-60min, 4 channels, 32000 pieces per channel	
Communication	RS485 interface	Modbus-RTU protocol, Baud rate: 1200~9600bps	
Protection		Front case IP66, rear case IP20	
Environment conditions	Operating temperature	(-25~+70) $^{\circ}$ C	
	Storage temperature	(-40~+85) $^{\circ}$ C	
	Relative humidity	(5~95)% (no condensation at 50 $^{\circ}$ C)	
	Anti-pollution grade	2	
	Measurement type	CAT III	
	Isolation	Signal, power supply and output terminals to case resistance > 100M Ω	
		Isolation voltage between signal, power supply and output > AC2kV	
EMC	> III grade		