

# S6-300

## Multifunctional Power Meter



- Measurement of current, voltage, active, reactive and apparent power, power factor, line frequency, energy, harmonic and MD.
- High-brightness LED display
- Extreme accuracy up to 0.25%
- Programmable adjustment for current and voltage transformers ratio
- With RS485 or RS 232 output
- Neutral current can be indicated
- Dual relay contacts for energy or alarm output
- Dual current loop output (option)
- Setting protected by password
- Memory of all setting value and energy data over ten years
- Memory of the Max. and Min. value (V. A. W)
- Outside dimension compatible for DIN standard 144 X 144mm



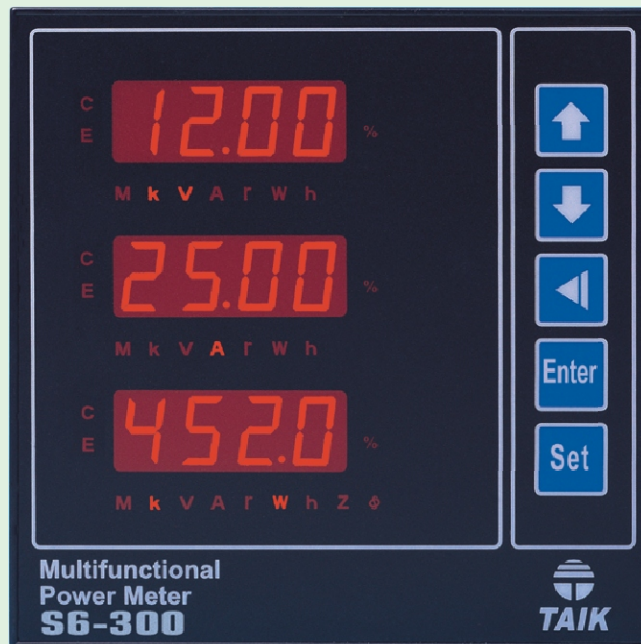
**TAIK ELECTRIC**

S6-300 is an upgraded model under the S6 Series of Multifunctional Power Meters. This new model equips not only original features but also adds new state of the art characteristics and functions.

These added characteristics include actual demand measurement in 4 parameters (A, VA, W, Var). The demand measurement of these selected parameters will be programmed by setting the time in a period. Besides, this new model is equipped with an internal real time clock (RTC) for monitoring maximum demand, it can also maintains time in the event of power failure by means of an internal lithium battery; S6-300 also equips optional function of dual analog outputs (DC 4-20mA) which need to be fed with outer current loop (DC 10 ~ 28V) for triggering, and this model also allows for the acquirement of measured signals with harmonics up to the 31th content as the waveform is in a distorted and non-continuous condition. The S6-300 is programmable measuring instrument for monitoring voltage, current,

Power factor, active power, apparent power, component and max. Var.

TAIK's new S6-300 is push buttons on the displaying screen in resolution on all numeric readings is selected bright LEDs. the required electric



power, reactive power, frequency, harmonic demand in A, VA, W,

also programmed by 5 front panel, and the 3 row of 4 digits instantaneous alpha-luminesced by the With this meter, parameters can be

effectively monitored by relay contactors, analog outputs and a convenient digital output. This meter is equipped with serial communication for a remote control through standard interface either RS-485 or RS-232. Meanwhile, S6-300 also utilizes the modbus communication protocol to transmit all electrical information in a digital form to PC, PLC, SCADA and even a display repeater.

This meter has specially designed for power monitoring applications in the field of industry, factory and building. It features main advantages with high performance, low cost, easy installation and stability, which can completely satisfy all customers' demands on their applications. With a combination of innovation and conventional process is thoroughly created a multi-function measuring instrument for a complete resolution of all difficulties in electricity. With this meter will save you more cost on all energy consumption.

## SPECIFICATION

Local display	Total	Phase 1	Phase 2	Phase 3	Accuracy**
L-L voltage	●*	●	●	●	0.2%
L-N voltage	●	●	●	●	0.2%
Line current	●*	●	●	●	0.2%
Neutral current	●				1%
Active power	●	●	●	●	0.5%
Reactive power	●	●	●	●	0.5%
Apparent power	●	●	●	●	0.5%
Power factor	●*	●	●	●	0.5%
Frequency	●*				0.05%
Active energy +	●	●	●	●	0.5%
Reactive energy +	●	●	●	●	0.5%
Active energy -	●	●	●	●	0.5%
Reactive energy -	●	●	●	●	0.5%
Total harmonic -I <sup>(1)</sup>	●*	●	●	●	2%
Total harmonic -V <sup>(1)</sup>	●*	●	●	●	2%

(1) up to 31th harmonic \*Average value \*\*Full scale of ranges

### Accuracy performance range

Current range	2 ~ 120%
Voltage range	2 ~ 120%
Power & energy	current, 2 ~ 120%, voltage, 2 ~ 120%
Power factor range	$\cos\theta$ (sin $\theta$ )0.5~1
Frequency range	45 ~ 70HZ
Distortion level	from 10% to 120%

### Input voltage

Voltage range (line to line)	8 ~ 500V
Voltage range (line to neutral)	5 ~ 290V
Maximum overload	750V
Input impedance	$\geq 200K\Omega$

### Input current

Current range	5A or 1A
Maximum overload	6A, continuous, 50A 5 sec. 15A, continuous, 250A 1 sec. (Option)
Input burden	$\leq 0.1VA$
Isolation	Each phase, 600V
Starting current	1% F.S.

### Power supply

Nominal voltage	AC 110V/220V $\pm 15\%$ , 50/60HZ or DC 110V, 24V $\pm 10\%$
Burden	(AC) $\leq 5VA$ , (DC) $\leq 5W$

### Display

Type	High-brightness red LED
Digital height	0.56", 14.2mm
Digital format	3 rows of 4 digits
Digits for Wh, Varh, Vah	8 digits (two rows)

### Relay contacts output for energy or alarm

Energy value	100 pulse for 1 KWh or 1KVarh
Alarm set point	2 point, programmable
Relay contacts	AC 240V 1 A, DC 24V 1A

### Demand

Actual demand with time into period	A, VA, W, Var
Time of period	1 ~ 60 min. programmable
Real time clock (option)	HH/MM/SS
Max. demand	A, VA, W, Var

### Analog output

Current loop	11~ 32V, DC 4 ~ 20mA
Output resistance	600 $\Omega$ (24V DC)
Output points	2 points, programmable
Output accuracy	$\pm 0.5\%$ RO.

### Communication

Interface	RS485 (standard), or RS232 (option)
Protocol	MODBUS, RTU framing
Baud rate	1200 ~ 38400 programmable
Address range	1 ~255 programmable
Data format	N.8.1/N.8.2/O.8.1/E.8.1 pro.
Number of meter	Up to 32 on standard RS485

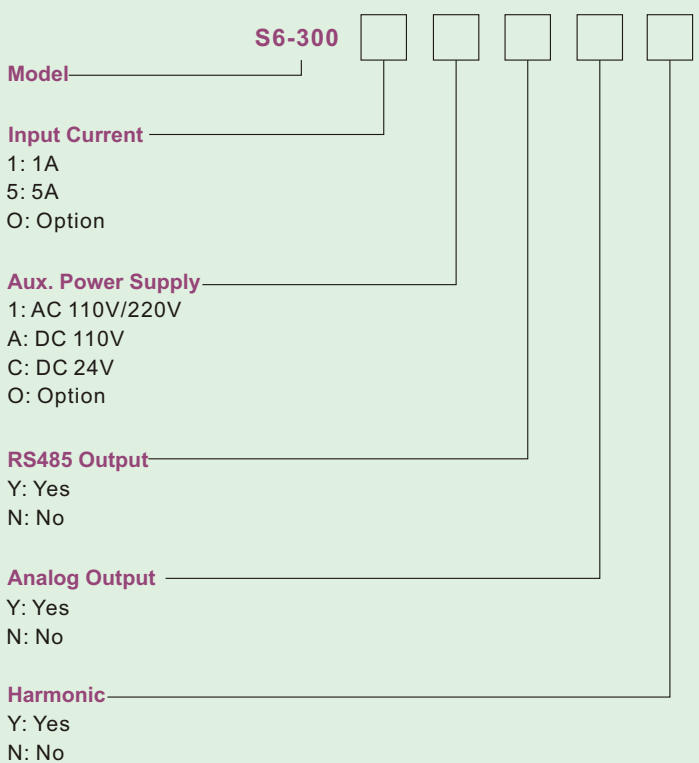
### General

Dielectric strength	IEC 688, AC 2.3KV 1 minute between Input/Output/Power AC 2.8KV 1 minute between all terminal/ground
Operating temperature	0 ~ 60 °C
Storage temperature	-10 ~ 70 °C
Temperature coefficient	$\leq 100PPM/^\circ C$
Max. humidity	95%

### Electromagnetic compatibility

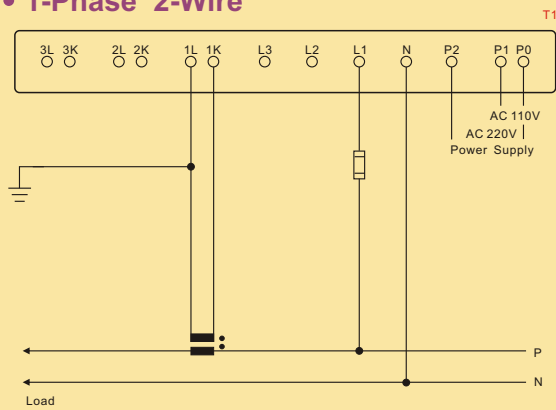
Withstanding impulse voltage	IEC 1000-4-5
Electrical transient in burst	IEC 1000-4-4
Electrostatic discharge	IEC 1000-4-2
Electromagnetic fields immunity	IEC 1000-4-3
Wave damping	IEC 255-4

## ORDERING INFORMATION

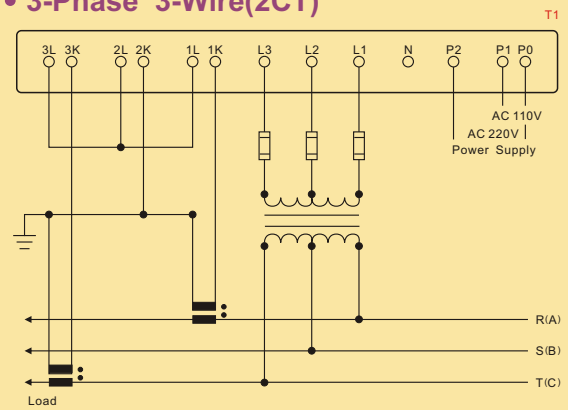


## CONNECTION

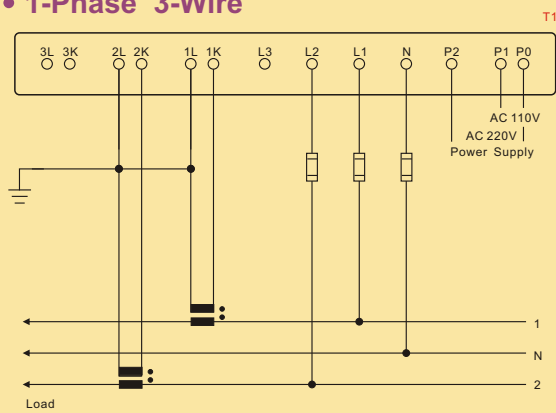
### • 1-Phase 2-Wire



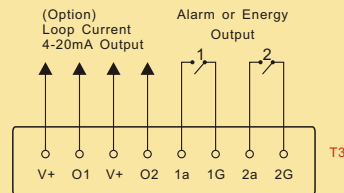
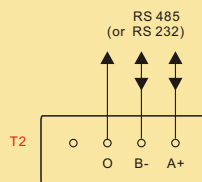
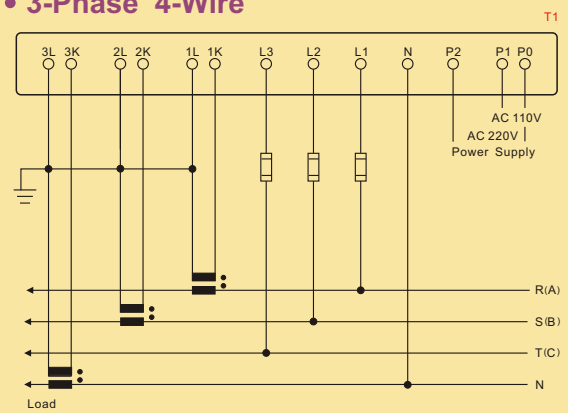
### • 3-Phase 3-Wire(2CT)



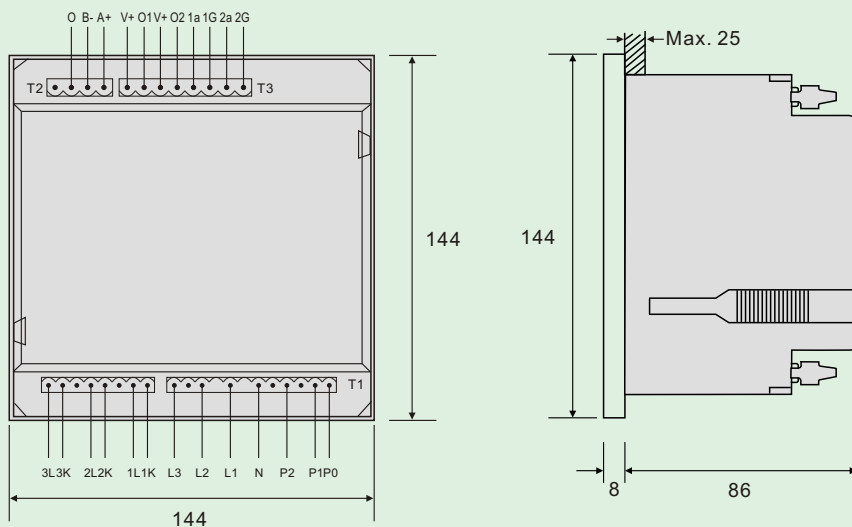
### • 1-Phase 3-Wire



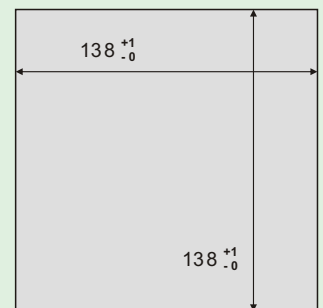
### • 3-Phase 4-Wire



## OUTSIDE DIMENSION(Unit:mm)



### • Panel Cut-Out



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