

## Power Analyzer

### Digital Power meter AN8721P(F)/AN8711P(F)



### Introduction

AN8721P(F)/AN8711P(F) AC/DC power meter adopts ARM7 series controller as the core, using direct sampling and intelligent identification technology, widely used for single-phase electrical equipments test, such as voltage, current, power, power factor, frequency, electric energy, time etc. Highlighted LED 3-window display, simple and fast operation, serial communication, over limit alarm, voltage/current ratio settings and other functions, precise and durable.

### Main features

- ★ Beautiful appearance, compact dimensions, low weight;
- ★ Fast measurement speed, up to 200ms refresh rate;
- ★ Voltage/current ratio can be set to expand measuring range;
- ★ Sound & light alarm for voltage/current/power over limit, satisfy fast identification of defected products on production line;
- ★ Minimum current measurement range is low to 0.1mA, meet the test requirement of standby power consumption;
- ★ Wide AC/DC range, suitable for various load;
- ★ RS-232/RS-485 port to realize automatic testing and data transmission;
- ★ Optional I/O port to realize remote control signal input and alarm signal output.

### Functions

- ★ Parameter settings: voltage/current ratio, integral threshold current, electric energy accumulating time, voltage upper/lower limit, current upper/lower limit, power upper/lower limits, alarm delay time, address, baud rate, buzzer On/Off, calculation mode and other parameters can be set, and preset parameters will be memorized;
- ★ Over limit alarm: sound & light alarm as certain parameter is out of the preset range, giving sound & light alarm signal automatically and output the digital signal (optional);
- ★ Switch of range: manual set to range, or power meter will automatically switch to a proper range under Auto range mode;
- ★ Accumulating Time: electric energy accumulating time can be set;
- ★ Energy accumulation: display the accumulated electric energy within the preset time;
- ★ Ratio settings: voltage/current ratios can be set based on the actual measurement and the ratio of primary and secondary of external transformer, easy expansion;
- ★ Serial communication: test results can be collected via RS-232 or RS-485 (optional) on computer.

## Spec.

Model	AN8721P(F)	AN8711P(F)
Channel	Single-phase	
Parameters	Voltage U, current I, active power P, reactive power Q, apparent power S, power factor $\lambda$ , phase angle $\Phi$ , frequency f, electric energy Wh, electric energy Time	
Crest factor(full range)	1.6	
Rated voltage range	600V	
Rated current range	1A/40A Optional: 100mA/5A	40A Optional: 20A, 5A
Voltage accuracy range	AC/DC: 3~600V	
Current accuracy range	AC/DC: 1mA~1A/40A (Optional: 0.1mA~100mA/5A)	AC/DC: 40mA~40A (Optional: 20mA~20A, 5mA~5A)
Voltage current accuracy	DC, 45Hz≤f≤65Hz: ± (display ×0.1%+ range ×0.1%)	
Active power accuracy	PF>0.5: ± (display ×0.1%+ range ×0.1%) PF≤0.5: ± (display ×0.25%+ range ×0.25%)	
Reactive power	PF=0: ± (display ×0.25%+ range ×0.25%)	
Active power resolution	0.001W	
Power factor range	±(0.1~1)	
Power factor accuracy	±0.01 (voltage/current amplitudes greater than 10% of the range)	
Frequency measurement range	DC, 45Hz≤f≤65Hz	
Frequency measurement accuracy	±(0.1%×display ) (voltage amplitudes greater than 10% of the range)	
Electric energy range	0~999999MWh	
Electric energy accuracy	PF>0.5: ± (display ×0.1%+ range ×0.1%) PF≤0.5: ± (display ×0.25%+ range ×0.25%)	
Energy accumulating time	999 hours 59 minutes 59 seconds	
Energy accumulating time accuracy	± (0.05%×display )	
Voltage current ratio	1~2000	
Data update Period	0.25, 0.5, 1[s]	
Alarm	5 groups: voltage/current/power upper/lower limit, threshold setting	
Interfaces	RS-232 (optional RS-485), digital I/O (optional)	
Dimension	213 (W, front plastic house) × 88 (H, front plastic house) × 386 (D, including terminals) mm	
Opening size	210(W)×85(H) mm	
Feets height	15 mm	
Net Weight(without packaging)	About 3kg	

[Condition] Temperature: 23 ± 5 °C, Humidity: 30% ~ 75% RH, power supply: AC 220V ± 10%, 50Hz ± 5%