



Model PW431D

Specifications

Voltage generators

Setting range	
4-phase ac (L-N)	4×0~150V
2-phase ac (L-L)	2×0~300V
dc (L-N)	4×0~±150V
dc (L-L)	1×0~±300V

Power

4-phase ac (L-N)	4×60VA at 150V
2-phase ac (L-L)	2×120 VA at 300V (two generators in series)
dc (L-N)	4×40W at ±150 V
dc (L-L)	1×80W at ±300 V

Accuracy	
	error < 0.08 % rd.+0.02 % rg. guar., at 0~150 V
	error < 0.04 % rd.+0.01 % rg. typ., at 0~150 V

Ranges	
	150V
Resolution	
	5mV for 150Vac
Distortion	
	< 0.05 % typ., (< 0.1 % guar.)

Current generators

Setting range	
6-phase AC (L-N)	6×0~15A
3-phase AC (L-N)	3×0~30A
1-phase AC (3L-N)	1×0~90A
dc (3L-N)	1×0~±60A

Power

6-phase AC (L-N)	6×150VA at 15A
3-phase AC (L-N)	3×240VA at 30A
1-phase AC (3L-N)	1×450VA at 90A
1-phase DC (3L-N)	1×480W at 60A
Max compliance	
voltage (L-N) (L-L)	15Vpk/32Vpk

Accuracy	
	error < 0.15 % rd.+0.05 % rg. guar., at 0~15A
	error < 0.05 % rd.+0.02 % rg. typ., at 0~15A

Ranges	
	15A
Resolution	
	1mA
Distortion	
	< 0.05 % typ. (< 0.1 % guar.)

General

Frequency	
Sine signal	DC, 1~2000Hz
Transient signal	dc~10.0 kHz
Accuracy	
	±1ppm
Resolution	
	0.001Hz

Phase

Angle range	-360°~360°(Lead)
Accuracy	<0.05° typ., <0.1° guar. at 50/60Hz
Resolution	±0.01°

Binary inputs

Number	8
Input characteristics	0~400Vdc threshold or potential free
Time resolution	50μs
Max. measuring time	infinite
Debounce/Degitch time	0~25ms
Counting function	< 3kHz at pulse width>150μs

Binary outputs, relay

Number	4
Type	Potential free relay contacts, software controlled
Break capacity ac	Vmax: 300Vac /Imax: 8A/ Pmax: 2000VA
Break capacity dc	Vmax: 300Vdc /Imax: 8A/ Pmax: 150W

Auxiliary dc supply

Voltage range	0~300V
Power	88W at 110V, 176W at 220V, 120W at 300V
Accuracy	error < 0.1 % rg. typ. (< 0.5 % rg. guar.)

DC voltage measuring inputs

Measuring range	0~±10V
Accuracy	error < 0.02% rg. typ. (< 0.05% rg. guar.)
Input impedance	100KΩ

DC current measuring inputs

Measuring range	0~±20mA
Accuracy	error < 0.02% rg. typ. (< 0.05% rg. guar.)
Input impedance	50Ω

In-built monitoring and recording

Monitoring	currents and voltage outputs
Recording	analog outputs, binary inputs/outputs status
Mode	real time monitoring, no external wiring is required
Recording length	16s

External analog recording unit (optional)

Channel	: 10
See details of optional accessory AR-10	

Power supply

Nominal input voltage	110~240Vac
Permissible input voltage	90~260 Vac
Nominal frequency	50/60Hz
Permissible frequency	45~65Hz

IEC61850 upgrade

Interpretation hardware is in-built. Please contact the supplier for options to activate the IEC61850 software support function

Environmental conditions

Operation temperature	0~+50° C
Storage temperature	-25~+70° C
Relative humidity	5~95% non - condensing
EMC (Emission)	IEC-61000-3-2/3
EMC (Immunity)	IEC 61000-4-2/3/4/5/6/11
Safety	IEC 61010-1

Others

PC connection	Ethernet
Local display	color LCD, 4.7"
GPS interface	RS232
Ground Socket (earth)	4 mm banana socket; front side
Weight	20kg
Dimensions (W x H x D)	360mm×157mm×367 mm

