

GIMAC1000

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It is an advanced digital Power Meter that enables power quality analysis such as high-precision measurement, harmonics, and THD measurement of various electric quantities of power distribution system.



Features

Measurement/precision measurement/Communication function

- Various measurement elements and high precision measurement
- Extended harmonic measurement range (31th harmonic)
- Wide range of PT inputs (AC 10~452V)
- Incorrect wiring check function
- Compact appearance design
- Free Voltage Control Power
- Automatic Scroll Display of Measured Items
- RS-485, Ethernet communication support
- Provide rapid spanning tree protocol function

Measurement

Order of display	Parameters	NO	EX	Accuracy (%)	Remarks	
1p-1a, 2a	Vavg	Vavg	■	■	±0.3%	-
1p-5a, 5b, 5c		Vab, Vbc, Vca	■	■	±0.3%	-
1p-6a, 6b, 6c		Va, Vb, Vc	■	■	±0.3%	-
1p-1b, 2b	Current	Iavg	■	■	±0.3%	-
1p-7a, 7b, 7c		Ia, Ib, Ic	■	■	±0.3%	-
1p-8a, 8b, 8c		Load factor Ia, Ib, Ic	■	■	-	-
1p-12a, 12b, 12c	Phase	∠VabVbc, ∠VabVca	-	■	±0.5°	3P 3W
1p-13a, 13b, 13c		∠VabIa, ∠VabIb, ∠VabIc	-	■	±0.5°	3P 3W
1p-12a, 12b, 12c		∠VaVb, ∠VaVc	-	■	±0.5°	3P 3W
1p-13a, 13b, 13c		∠VaIa, ∠VbIb, ∠VcIc	-	■	±0.5°	3P 3W
1p-1c	Power	P	■	■	0.5class	IEC1036
1p-9a, 9b, 9c		Pa, Pb, Pc	-	■	0.5class	IEC1036
1p-3b		Q	■	■	0.5class	IEC1036
1p-10a,10b,10c		Qa, Qb, Qc	-	■	0.5class	IEC1036
1p-3c		S	■	■	0.5class	IEC1036
1p-11a,11b,11c		Sa, Sb, Sc	-	■	0.5class	IEC1036
1p-2c	Power	Wh	■	■	0.5class	IEC1036
1p-4b		Varh	■	■	0.5class	IEC1036
1p-18c		rWh	-	■	0.5class	IEC1036
1p-18b		rVarh	-	■	0.5class	IEC1036
1p-4c		VAh	■	■	0.5class	IEC1036
1p-4a	frequency	F	■	■	±0.05HZ	-
1p-3a	Power factor	PF	■	■	Based on phase error	+ : Lag, -: Lead
1p-14a,14b,14c		PFa, PFb, PFC	-	■	Based on phase error	
1p-15a,15b,15c		DPFa, DPFB, DPFC	-	■	Based on phase error	
1p-16a,16b,16c	THD	Va(ab), Vb(bc), Vc(ca)의 THD	-	■	-	-
1p-17a,17b,17c		Ia, Ib, Ic의 THD	-	■	-	-
2p-A상 1a(V), 1b(I) ...31a(V), 31b(I) 3p-B상 1a(V), 1b(I) ...31a(V), 31b(I) 4p-C상 1a(V), 1b(I) ...31a(V), 31b(I)	Hamonics	Va(ab), Vb(bc), Vc(ca) 1st ~ 31th	-	■	-	-
		Ia, Ib, Ic 1st ~ 31th hamonics	-	■	-	-
5p-2b	DEMAND	Demand W	-	■	-	-
5p-1a, 1b, 1c, 2a		Demand Ia, Ib, Ic, Iavg -	-	■	-	-
6p-1a, 1b, 1c, 2a	MAX	max Ia, max Ib, max Ic, max Iavg	-	■	-	-
6p-4a, 4b, 4c		max Va(ab) THD, max Vb(bc) THD max Vc(ca) THD	-	■	-	-
6p-5a, 5b, 5c		max Ia THD, max Ib THD, max Ic THD	-	■	-	-
6p-3b		max W	-	■	-	-
6p-3a		max VAR	-	■	-	-
6p-2b		max VA	-	■	-	-
6p-7a, 6a, 6b, 6c		max Demand Iavg, Ia, Ib, Ic	-	■	-	-
6p-7b		max Demand W	-	■	-	-

Specification

Type	Specification		
Wirings	1P2W, 1P3W, 3P3W (Delta), 3P3W (Y), 3P4W		
Input	Frequency	50Hz/60Hz	
	Voltage	PT	AC 10~452V (PT 2nd 110V)
	Current	CT	0.05~6A (Rating : 5A) or 0.01~1.2A (Rating : 1A)
	Control voltage	AC/DC 100~240V (Free Voltage)	
	Power consumption	4.5W or less	
	Burden	PT : 0.1VA or less CT : 0.5VA or less	
Insulation Resistance	DC 500V 10MΩ or higher		
Insulation Voltage	AC 2kV(1kV)/for 1min		
Impulse Voltage	AC 5kV (3kV) or higher, 1.2 x 50μs Standard waveform		
Overload withstand	Current circuit	Rated current x 1.2times for 3hours Rated current x 8times for 2seconds	
	Voltage circuit	Rated voltage x 1.15times for 3hours	
Fast Transient/Burst Immunity	Power Input 4kV (PT, CT)		
Electrostatic Discharge	Air 8kV Contact 6kV		
Operation temperature	-20°C~ +60°C		
Storage temperature	-25°C~ +70°C		
Humidity	RH 80% or less (non-condensing)		
Certification	IEC60255, IEC61000-4		
Communication	MODBUS RTU/RS485, MODBUS TCP/IP ETHERNET		
Dimension (W×H×D)	110×110×84.6 mm (basic), 110×110×106.6 mm (ETHERNET TYPE)		
Weight	0.52kg		