

# Digital Power Meter

## Technical specifications

### Rating

Model	GIMAC-i	
<b>Wirings</b>	1P2W, 1P3W, 3P3W, 3P4W	
<b>Input</b>	<b>Frequency</b>	50Hz / 60Hz
	<b>Voltage</b>	PT AC 10~452V
	<b>Current</b>	CT 0.05~6A
	<b>Control voltage</b>	AC/DC 88~264V (Free voltage)
	<b>Power consumption</b>	Max. 2W
	<b>Burden</b>	PT Max. 0.5VA
		CT Max. 0.5VA
<b>Insulation Resistance</b>	Over DC 500V 100MΩ	
<b>Insulation Voltage</b>	AC 2kV (1kV) / 1min	
<b>Impulse Voltage</b>	AC 5kV (3kV) / $1.2 \times 50\mu s$	
<b>Overload withstand</b>	<b>Current circuit</b>	2 In for 3 hours
	<b>Voltage circuit</b>	20 In for 2 seconds
	<b>Fast Transient Disturbance</b>	1.15 Vn for 3 hours
<b>ESD(Electrostatic Discharge)</b>		
Air 8kV Contact 6kV		
<b>Operation temperature</b>	-10°C ~ 55°C	
<b>Storage temperature</b>	-25°C ~ 70°C	
<b>Humidity Average</b>	30 ~ 80%	
<b>Altitude</b>	1000m and below	
<b>Others</b>	Non-impact place Non-air pollution place	
<b>Standard</b>	IEC 60255, IEC61000-4	
<b>Communication</b>	MODBUS/RS-485	
<b>Dimension(W × H × D)</b>	144 × 144 × 85 (mm)	
<b>Weight</b>	0.52 kg	

### Self-diagnosis

Item	LCD display
<b>Mis-wiring</b>	Conn Chc (connection check)
<b>Memory error</b>	ERROR 1
<b>Power fail</b>	ERROR 2
<b>Option error</b>	ERROE 3
<b>Setting error</b>	ERROR 4
<b>Calibration error</b>	ERROR 5

## Measurement functions

	Parameters	NO	EX	Accuracy(%)	Remarks
Voltage	Vavg	■	■	±0.3%	-
	Vab, Vbc, Vca	■	■	±0.3%	-
	Va, Vb, Vc	■	■	±0.3%	-
Current	Iavg	■	■	±0.3%	-
	Ia, Ib, Ic	■	■	±0.3%	-
	Load factor Ia, Ib, Ic	■	■	-	-
Phase	∠VabVbc, ∠VabVca	-	■	±0.5°	3P3W
	∠Vabla, ∠Vablb, ∠Vablc	-	■	±0.5°	3P3W
	∠VaVb, ∠VaVc	-	■	±0.5°	3P4W
	∠Vala, ∠Vblb, ∠Vclc	-	■	±0.5°	3P4W
Power	P	■	■	±0.5%	IEC 1036
	Pa, Pb, Pc	-	■	±0.5%	IEC 1036
	Q	■	■	±0.5%	IEC 1036
	Qa, Qb, Qc	-	■	±0.5%	IEC 1036
	S	■	■	±0.5%	IEC 1036
	Sa, Sb, Sc	-	■	±0.5%	IEC 1036
Energy	Wh	■	■	±0.5%	IEC 1036
	Varh	■	■	±0.5%	IEC 1036
	rWh	-	■	±0.5%	IEC 1036
	rVarh	-	■	±0.5%	IEC 1036
	VAh	■	■	±0.5%	IEC 1036
Frequency	F(Hz)	■	■	0.05Hz	-
Power factor	PF	■	■		+ : Lag - : Lead
	PFa, PFb, PFc	-	■		
	DPFa, DPFB, DPFC	-	■		
THD	THD(V)	-	■	-	Va(ab), Vb(bc), Vc(ca)
	THD(I)	-	■	-	Ia, Ib, Ic
Harmonics	1 <sup>st</sup> ~ 15 <sup>th</sup> Harmonics (V)	-	■	-	Va(ab), Vb(bc), Vc(ca)
	1 <sup>st</sup> ~ 15 <sup>th</sup> Harmonics (I)	-	■	-	Ia, Ib, Ic
Demand	Demand W	-	■	-	
	Demand Ia, Ib, Ic, Iavg	-	■	-	-
MAX	max Ia, max Ib, max Ic, max Iavg	-	■	-	-
	max Va(ab) THD, max Vb(bc) THD	-	■	-	-
	max Vc(ca) THD	-	■	-	-
	max Ia THD, max Ib THD,	-	■	-	-
	max Ic THD	-	■	-	-
	max W	-	■	-	-
	max VAR	-	■	-	-
	max VA	-	■	-	-
max Demand Iavg, Ia, Ib, Ic		-	■	-	-
max Demand W		-	■	-	-