

**RELIABLE, COMPACT,  
ACCURATE WITH  
COMPETITIVE PRICE**



## **PT. MAM Internasional**

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PT. Maju Alam Mandiri Internasional started in electrical business since 2003. In line with the growth of electricity market in Indonesia, PT. Maju Alam Mandiri Internasional has proved as one of reputable company in electrical distribution business. We obtained this achievement by the performance of our high quality products and services, and certainly by the support of our valuable customers. PT. Maju Alam Mandiri Internasional continues to build and reinforce the competencies of the team to back up customer solution needs. We will focus in providing a complete solution to customer needs in these market segments : Highrise Building, Power Generation, Utilities, Oil & Gas, Mining, Data Center and Infrastructure.

Our products:

- Single Phase Electronic kWh Meter - Basic
- Three Phase Electronic kWh Meter - Basic
- Three Phase Electronic kWh Meter Multi Rate
- Smallest Single Phase Electronic kWh Meter
- Smallest Single Phase Electronic kWh Meter Modbus
- Single Phase Electronic kWh Meter Modbus
- Three Phase Electronic kWh Meter Modbus
- Single Phase Electronic kWh Meter - Modbus Prepaid
- Three Phase Electronic kWh Meter - Modbus Prepaid
- Single Phase Electronic kWh Meter Prepayment
- Three Phase Electronic kWh Meter Prepayment
- Single Phase Electronic kWh Meter STS Prepayment - Token
- Three Phase Electronic kWh Meter STS Prepayment - Token
- Photoelectric Direct-reading Remote-transmitting Water Meter - Modbus
- Multi Jet STS Prepayment Water Meter
- STS Keypad Diaphragm Prepayment Gas Meter



District 8 - Jakarta



Pasific Place - Jakarta



Cibis Tower - Jakarta

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Altira Business Park



Belleza Office Tower



WTC II, III, VI - Jakarta



Pasar Mayestik



Pasar Tanah Abang

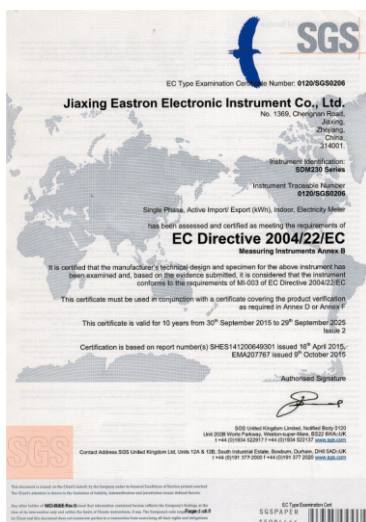
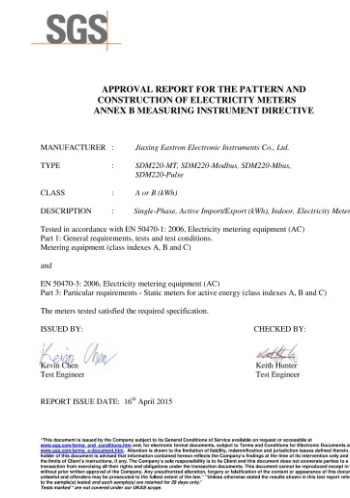
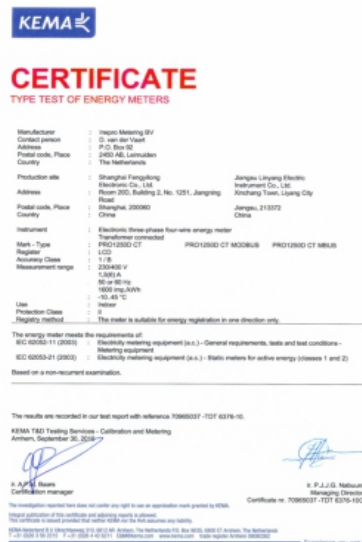
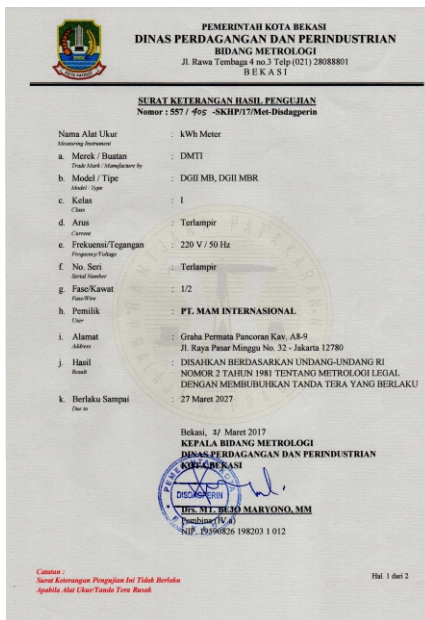
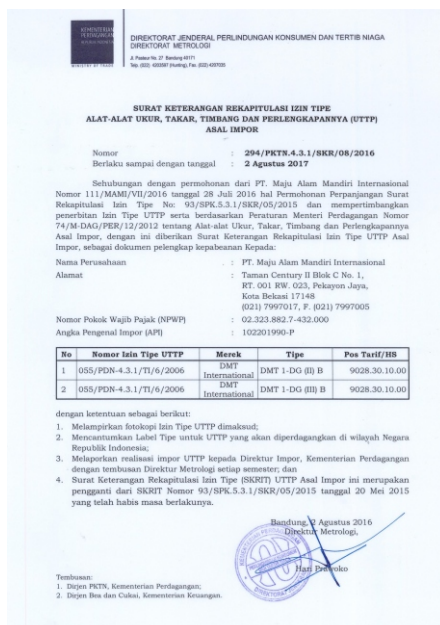


Pasar Senen Blok III

To get more than a meter



# Certificate



## Project References

No.	Project Name	Qty	
1	Jakarta Box Tower - Jakarta	250	Pcs
2	PTC Palembang	100	Pcs
3	Bogor ICON	300	Pcs
4	Regatta Apartment	350	Pcs
5	Avenue 88 Apartment - Surabaya	850	Pcs
6	GP Plaza - Jakarta	250	Pcs
7	ECO Home Apartment - Tangerang	400	Pcs
8	Manhattan Mall & Apartment - Medan	350	Pcs
9	Nine Residence Apartment - Jakarta	230	Pcs
10	TRANSMART	200	Pcs
11	Anandamaya Apartment - Jakarta	700	Pcs
12	Altira Office Park - Jakarta	200	Pcs
13	Chase Tower - Jakarta	200	Pcs
15	Metropolitan - Jakarta	200	Pcs
16	Cibis Tower - Jakarta	300	Pcs
17	Ciputra Word II - Jakarta	500	Pcs
18	District 8 - Jakarta	1300	Pcs
19	WTC II - Jakarta	500	Pcs
20	WTC III - Jakarta	1500	Pcs
21	WTC VI - Jakarta	100	Pcs
22	WTC - Surabaya	150	Pcs
23	Gedung Ferrari - Jakarta	200	Pcs
24	Signature Park Apartment - Jakarta	2800	Pcs
25	Plaza Mayestik - Jakarta	2000	Pcs
26	Pasar Perniagaan Pasar Pagi - Jakarta	2000	Pcs
27	Pasar Cipulir - Jakarta	1550	Pcs
28	Pasar Senen Blok III - Jakarta	2300	Pcs
29	Sky Line - Bandung	850	Pcs
30	Taman Melati - Jatinangor	600	Pcs
31	Menara Karya - Jakarta	550	Pcs
32	Sudirman Place - Jakarta	450	Pcs
33	Pasific Place - Jakarta	1000	Pcs
34	Queen Victoria - Batam	150	Pcs
35	Talavera II Office - Jakarta	125	Pcs
36	Belleza Apartment - Jakarta	1000	Pcs
37	Mall Taman Palem - Jakarta	300	Pcs
38	BEC - Bandung	300	Pcs
39	Jatinangor Town Square - Sumendang	450	Pcs
40	Plaza Asia - Tasikmalaya	300	Pcs
41	Dago Butik - Bandung	250	Pcs
42	Blue Saphir - Yogyakarta	250	Pcs
43	Pakubowono Residence - Jakarta	350	Pcs
44	Jakarta Residence (JAAC) - Jakarta	600	Pcs
45	Serang Mall - Banten	300	Pcs
46	Aston Mangga Dua - Jakarta	520	Pcs
47	Menado Trade Center - Menado	1000	Pcs
48	Equity Tower - Jakarta	400	Pcs
49	Cibinong Mall - Bogor	500	Pcs
50	Pondok Indah Mall - Jakarta	500	Pcs
51	Pasar Tanah Abang Blok C	500	Pcs
52	Meikarta Apartment - Cikarang	3950	Pcs
53	AEON Mixed Used Sentul City - Bogor	250	Pcs

## To get more than a meter



# DMTI DG II MBC Modbus

Smallest Single Phase Electronic Watt-Hour Meter - Modbus System

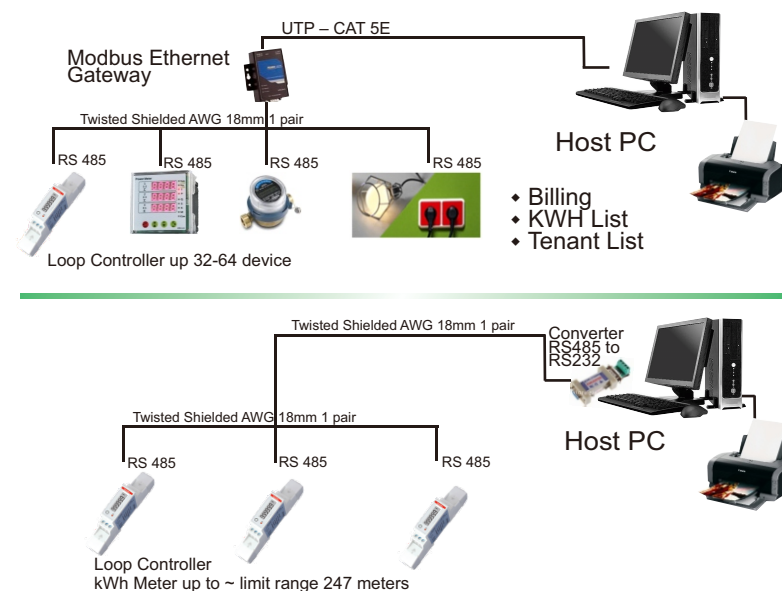
## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL**, Ltd produces **DMTI-DG(II)MBC** single phase, which is din rail electronic watt-hour meter "with a blue back-lighted LCD screen for perfect reading" are used to measure single-phase like residential, utility and Industrial application. The unit measures and displays various important electrical parameters, and provide a communication port for remote reading and monitoring. The DMTI DG(II)MBC is an advanced single phase energy monitoring solution with built in configuration push button and LCD data displaying. The Compact design and din rail installation provides a easy and economical solution for your metering demand. With RS485 Modbus port, the meter is easily to remote communicate with other AMR/SCADA systems.

## Standard Features:

- ✓ Max.45A Direct Connection
- ✓ Provide RS485 port - Modbus RTU;
- ✓ White Blue Back - lighted LCD Display;
- ✓ Single Pole width (modulus 17.5mm);
- ✓ Two Pulse Output
- ✓ Better than Class 1 / B accuracy for active energy.
- ✓ Extension terminals cover, in order to protect to use safety.

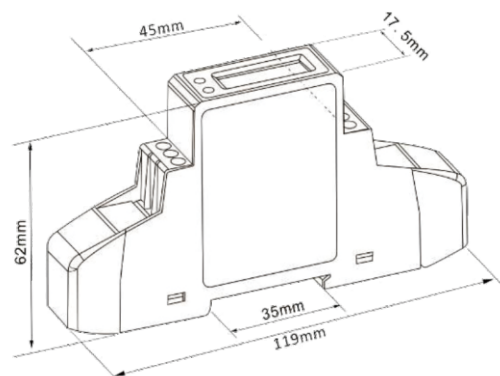
## System Operation



**DMTI DG(II)MBC**  
Smallest Single Phase Modbus



## Dimensions



119mm (H) x 17.5mm (W) x 62mm (D)

## General Specifications:

<b>Voltage</b>	
Voltage Range	230VAC
Voltage Range	176 ~ 276VAC
<b>Current</b>	
Base Current (Ib)	5A
Max. Current (I <sub>max</sub> )	45A
Min. Current (I <sub>min</sub> )	0.25A
Starting Current	0.45% of Ib
Power Consumption	<2W/10VA
Frequency	
AC Voltage Withstand	4kV for 1 minute
Impulse Voltage Withstand	6kV - 1.2μs Waveform
Overcurrent Withstand	30I <sub>max</sub> for 0.01s
Pulse output rate	1000imp/kWh (default)
	100/10/1 imp/kWh/kVAh (configurable)
<b>Display</b>	LCD with backlight
Max. Reading	99999.9kWh
<b>Accuracy</b>	
Active Energy	Class 1 IEC62053-21
	Class B EN504070-3

## Enviroments:

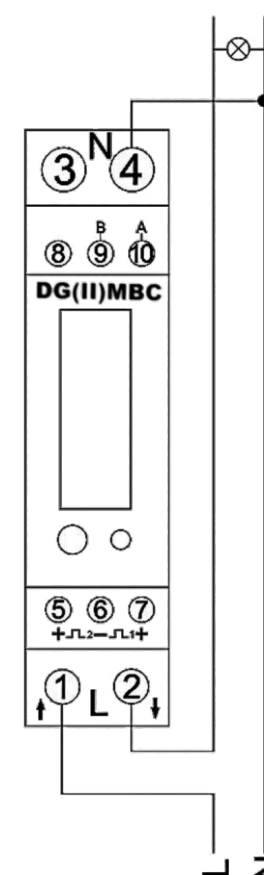
Operating Humidity	≤90%
Storage Humidity	≤95%
Operating Temperature	-25°C ~ +55°C
Storage Temperature	-40°C ~ +70°C
Reference humidity	23°C ± 2°C
Altitude	up to 2500m
Warm up time	10s
Installation category	CAT II
Mechanical Enviroment	M1
Electromagnetic Enviroment	E2
Degree of Pollution	2
Sealing	IP51 (Indoor)

DMTI DG (II)MBC Specification

## Modbus:

Bus Type	RS485
Protocol	Modbus RTU
Baud Rate	9600bps default
Parity	Even/Odd/None(default)
Address Range	1 - 247
Max. Bus Loading	1000m

## Wiring Diagram





# DMTI DG II Modbus

Single Phase Electronic Watt-Hour Meter - Modbus System

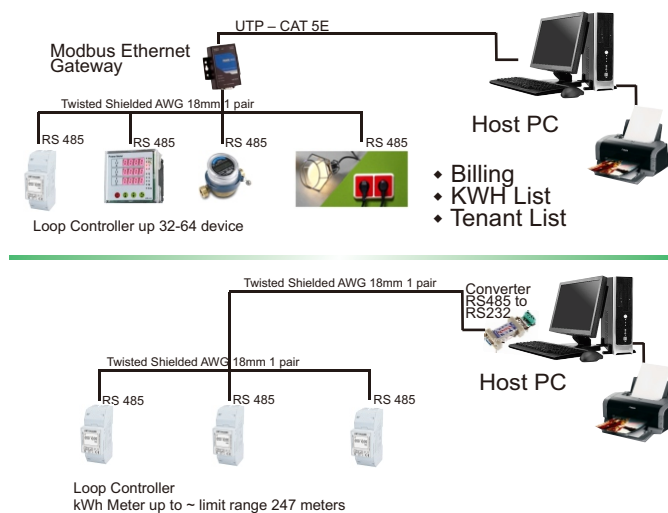
## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd** produces **DMTI-DG(II)MB** single phase, which is din rail electronic watt-hour meter with MODBUS protocol. Output is LCD displayed base on kWh and the data can be transported by isolated RS485. These type is produced according to International Standard IEC 62053-21. It accurately and directly measure power consumption active energy with rated frequency 50 Hz AC power network. The unit measures and displays various important electrical parameters. It has following features: good reliability, small volume, light weight, nice appearance, convenient installation, etc.

## Standard Features:

- ✓ 35mm standard DIN rail installation.
- ✓ 6+1 or 5+2 digits LCD display.
- ✓ Provides with RS485 port communication with MODBUS RTU protocol to read power consumption through PC Software.
- ✓ Linked into one system intergrated based on MODBUS protocol among other devices such as : lighting, air-conditioning, fire alarm, etc.
- ✓ Provides readable data of voltage, current, power factor, frequency, kVA, kVAR, kW and maximum demand

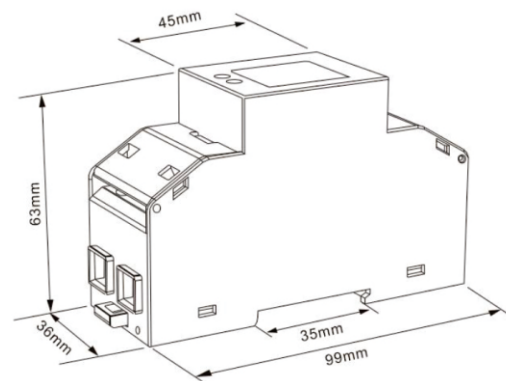
## System Operation



**DMTI DG(II)MB**  
Single Phase Modbus - Multifunction



## Dimensions



99mm (H) x 36mm (W) x 63mm (D)

## General Specifications:

Voltage	
Nominal Voltage Un	230V
Voltage Range	176-276V AC
Current	
Base current (Ib)	10A
Maximum current (Imax)	100A
Mini Current (Imin)	0.5A
Starting Current	0.4% of Ib
Power consumption	<2W/10VA
Frequency	
Nominal frequency fn	50Hz, 60Hz (±10%)
AC Voltage withstand	4KV for 1 minute
Impulse voltage withstand	5KV-1.2μs waveform
Over current withstand	30Imax for 0.01s
Pulse 1 output rate	configurable, default 1000/kWh
Pulse 2 output rate	non-configurable, default 1000/kWh
Display	LCD with backlight
Max. Reading	999999.9kWh

## Accuracy:

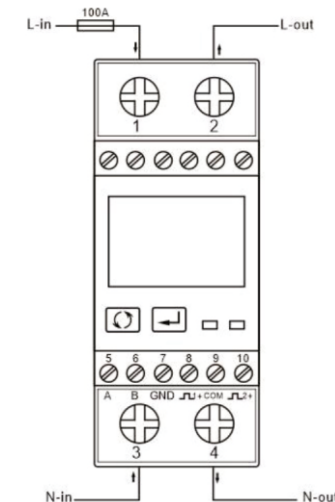
Voltage	0.5% of range max.
Current	0.5% of range max.
Frequency	0.2% of mid-frequency
Active Power	1% of range maximum
Reactive Power	1% of range maximum
Apparent Power	1% of range maximum
Active Energy	Class 1 IEC62503-21
	Class B EN50470-3
Reactive Energy	1% of range maximum

## Enviroments:

Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +70°C
Reference temperature	23°C ± 2°C
Relative humidity	0 to 95%, non-condensing
Degree of pollution	2

DMTI DG (II)MB Specification

## Wiring Diagram





# DMTI DG II MBR

Single Phase Electronic Watt-Hour Meter - Modbus Multi Tariff

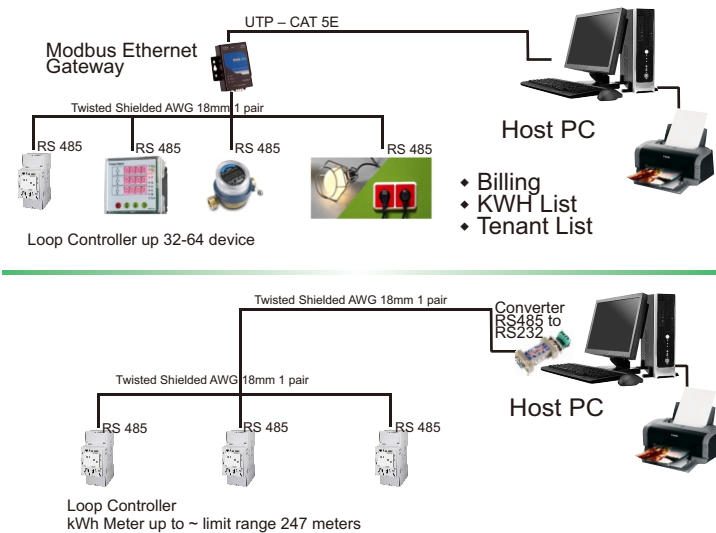
## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL**, Ltd produces **DMTI-DG(II)MBR** single phase, which is din rail electronic watt-hour meter “with a blue back-lighted LCD screen for prefect reading” are used to measure single-phase like residential, utility and Industrial application. The unit measures and displays various important electrical parameters, and provide a communication port for remote reading and monitoring. The DMTI DG(II)MBR is an advanced single phase energy monitoring solution with built inconfiguration push button and LCD data displaying. Its bi - directional measurement make the meter suitable for active and reactive energy and power monitoring applications. With RS485 Modbus port, the meter is easily to remote communicate with other AMR/SCADA systems.

## Standard Features:

- ✓ Measures 4 TARIFFS' kWh/time. and Kvarh, KW, Kvar, KVA, PF, Hz, dmd, V, A, etc.
- ✓ Bi-directional measurement IMP & EXP
- ✓ Two pulse outputs
- ✓ RS485 Modbus
- ✓ Din rail mounting 35mm
- ✓ 100A direct connection
- ✓ Better than Class 1 / B accuracy

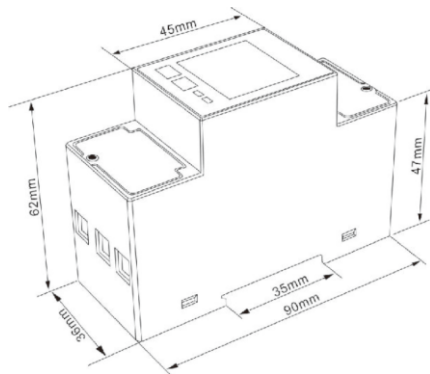
## System Operation



**DMTI DG(II)MBR**  
Single Phase Modbus - Multi Tariff



## Dimensions



90mm (H) x 36mm (W) x 62mm (D)

## General Specifications:

Voltage	
Nominal Voltage Un	230V
Voltage Range	176-276V AC
Current	
Base current (Ib)	5A
Maximum current (I <sub>max</sub> )	100A
Mini Current (I <sub>min</sub> )	0.25A
Starting Current	0.4% of Ib
Power consumption	<2W/10VA
Frequency	
Nominal frequency f <sub>n</sub>	50Hz, 60Hz (±10%)
AC Voltage withstand	4KV for 1 minute
Impulse voltage withstand	6KV-1.2μs waveform
Over current withstand	30I <sub>max</sub> for 0.01s
Pulse output rate	1000imp/kWh (default)
	100/10/1 imp/kWh/kVArh (configurable)
Display	LCD with blue backlight
Max. Reading	99999.99kWh

## Tariff specifications:

Tariff number	4
Time segments	10
Clock accuracy	≤0.5 S (every 24 hours)
Battery Voltage	3.6V DC, ≥1.2Ah

## Accuracy:

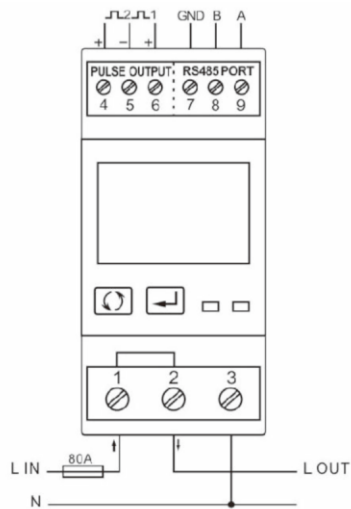
Voltage	0.5% of range max.
Current	0.5% of nominal
Frequency	0.2% of mid-frequency
Power factor	1% of unity
Active Power	1% of range maximum
Reactive Power	1% of range maximum
Apparent Power	1% of range maximum
Active Energy	Class 1 IEC62503-21
	Class B EN50470-3
Reactive Energy	1% of range maximum

DMTI DG (II)MBR Specification

## Enviroments:

Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +70°C
Reference temperature	23°C ± 2°C
Relative humidity	0 to 95%, non-condensing
Altitude	up to 2500m
Warm up time	10s
Degree of pollution	2

## Wiring Diagram:





# DMTI DG III Modbus

Three Phase Electronic Watt-Hour Meter - Modbus System

## Application

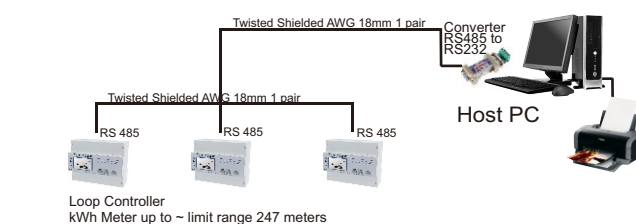
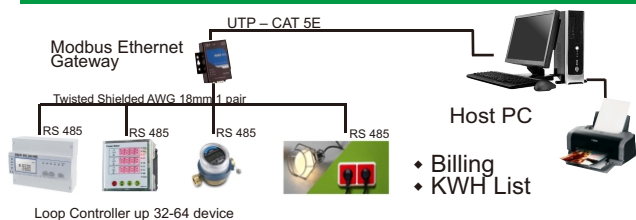
**DIGITAL METER TECHNOLOGY INTERNATIONAL**, Ltd produces **DMTI-DG(III)MB** three phase, which is din rail electronic watt-hour meter with measures and displays the characteristics of three phase four wires (3P4W) supplies, including voltage, frequency, current, power, active and reactive energy, imported or exported.

Energy is measured in terms of kWh, kVarh. Maximum demand current can be measured over preset periods of up to 60 minutes. In order to measure energy, the unit requires voltage and current inputs in addition to the supply required to power the product. DG(III)MB supports max. 100A direct connection, saves the cost and avoid the trouble to connect external CTs, giving the unit a cost-effective and easy operation. Built-in interfaces provides pulse and RS485 Modbus RTU outputs. Configuration is password protected.

## Standard Features:

- ✓ The Unit can measure and display line voltage, line frequency, currents, current demands, power, maximum power demand and power factor, active energy imported and exported, reactive energy imported and exported.
- ✓ The unit has password-protected set-up screens for changing password, change parameter Modbus (address id, baud rate, parity, stop bit), demand Interval Time (DIT), reset for demand measurements, pulse output duration, set CT ratio value for real time measure & display a CT connection type.

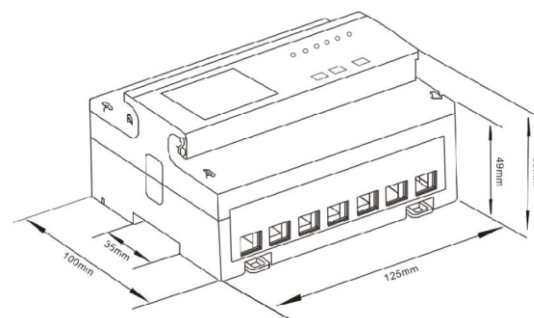
## System Operation



**DMTI DG(III)MB**  
Three Phase Modbus - Multi-function



## Dimensions



100mm (H) x 125mm (W) x 65mm (D)

## General Specifications:

Voltage	
Nominal Voltage Un	3x230V / 400VAC
Voltage Range	L to L:304V to 480VAC L to N: 176V to 276VAC
Current input	
Direct connect type	100A max
CT connect type	5A secondary input
Burden of CT circuit	<0.6VA/Phase
Frequency	
Nominal frequency fn	50Hz, 60Hz (±10%)

Instantaneous Power	
Direct connect type	0 to 99,000W /Var/VA
CT connect type	0 to 9,900,000W/Var/VA
Maximum demand power	since last Demand reset
Power factor	since last Demand reset

Current	
Pulse 1 output rate	configurable
Direct connect type	default = 2.5Wh/Varh
CT connect type	default = 1Wh/Varh
Pulse 2 output rate	non-configurable, its constans is:
Direct connect type	400imp/kWh
CT connect type	1000imp/kWh
Max. Reading	999999.99kWh / kVarh

## Accuracy:

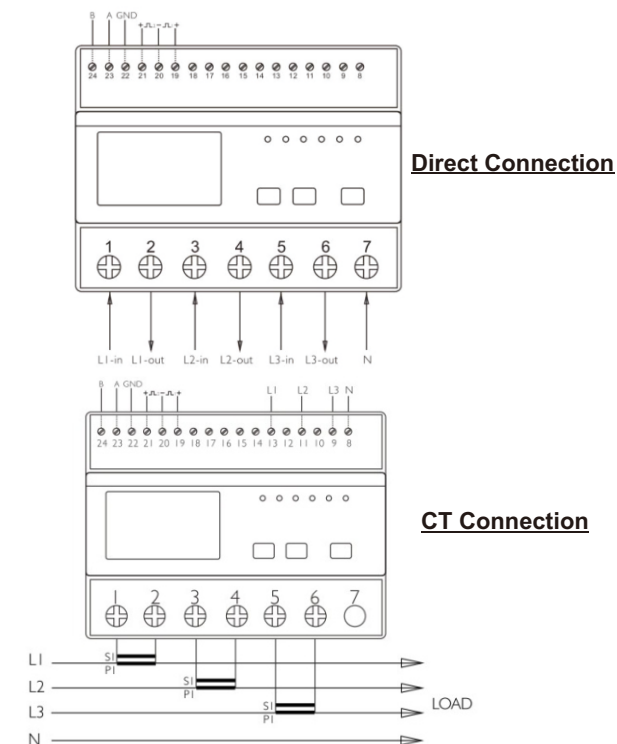
Voltage	0.5% of range max.
Current	0.5% of nominal
Frequency	0.2% of mid-frequency
Power factor	1% of unity (0.01)
Active Power (W)	±1% of range maximum
Reactive Power (Var)	±1% of range maximum
Apparent Power (VA)	±1% of range maximum
Active Energy (Wh)	Class 1 IEC62503-21
Reactive Energy (Varh)	±1% of range maximum
Response time to step input	1s, typical, to >99% of final reading at 50Hz

DMTI DG (III)MB Specification

## Enviroments:

Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +70°C
Relative humidity	0 to 95%, non-condensing
Altitude	Up to 3000m
Warm up time	1 minute
Vibration	10Hz to 50Hz, IEC60068-2-6, 2g
Shock	30g in 3 planes
Sealing	IP51 (Indoor)

## Wiring Diagram:





# DMTI DG III MBR

Three Phase Electronic Watt-Hour Meter - Modbus Multi Tariff

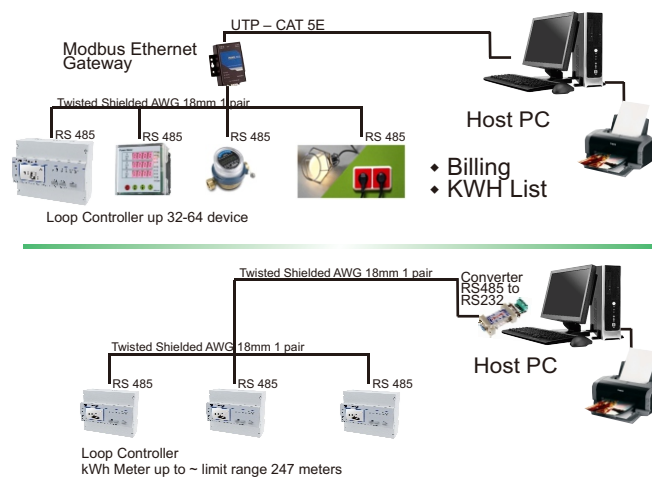
## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL**, Ltd produces **DMTI-DG(III)MBR** three phase, which is din rail electronic watt-hour meter “with a blue back-lighted LCD screen for perfect reading” are used to measure single-phase like residential, utility and Industrial application. The unit measures and displays various important electrical parameters, and provide a communication port for remote reading and monitoring. The DMTI DG(III)MBR is an advanced three phase energy monitoring solution with built in configuration push button and LCD data displaying. Its bi - directional measurement make the meter suitable for active and reactive energy and power monitoring applications. With RS485 Modbus port, the meter is easily to remote communicate with other AMR/SCADA systems.

## Standard Features:

- ✓ 4 Tariffs + 10 Segments
- ✓ Full parameters measured (kWh, kVarh, kVar, kVA, P, F, PF, Hz, dmd, V, A, etc)
- ✓ Two pulse outputs
- ✓ RS485 Port Modbus RTU
- ✓ 35mm DIN rail mounted
- ✓ 100A direct connect load
- ✓ 7 modular wide
- ✓ Button navigation

## System Operation



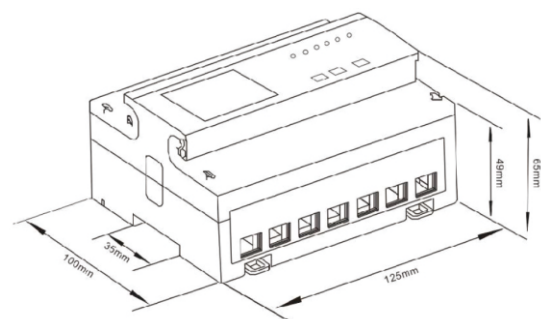
To get more than a meter

## DMTI DG(III)MBR

Three Phase Modbus - Multi function  
Multi Tariff



## Dimensions:



100mm (H) x 125mm (W) x 65mm (D)

## General Specifications:

Voltage	
Nominal Voltage Un	3x230V / 400VAC
Voltage Range	L - L:300 ~ 500VAC
	L - N: 161 ~ 276VAC
Current	
Basic Current (Ib)	1.5A (CT Connection)
	10A (Direct Connection)
Max. Current (Imax)	6A (CT Connection)
	100A (Direct Connection)
Starting Current	0.4% of Ib
Power consumption	≤2W
Frequency	50~60Hz
Constant	3200imp/kWh (CT Connection)
	400imp/kWh (Direct Connection)
AC Voltage withstand	2kV for 1 minute
Pulse Voltage withstand	6kV~1.2μs waveform
Clock Accuracy	≤ 0.5s (every 24hours)
Battery Voltage	3.6VDC, 1.2Ah
Tariff, Period	4, 10
Historical Record	12 months for active energy
Memory Backup	EEprom
Data Storage	20 years after power off
Display	LCD with a blue backlight

## Accuracy:

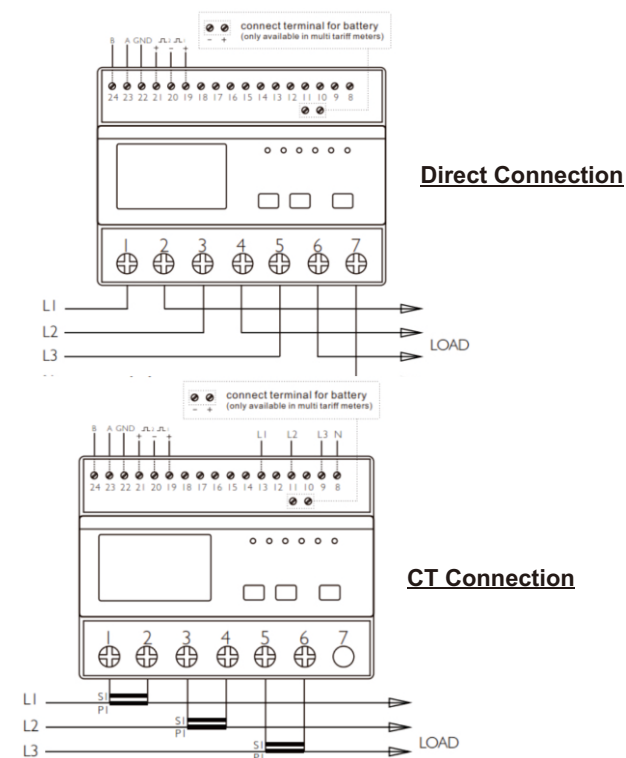
Voltage	0.5% of range max.
Current	0.5% of nominal
Frequency	0.2% of mid-frequency
Power factor	1% of unity (0.01)
Active Power (W)	±1% of range maximum
Reactive Power (Var)	±1% of range maximum
Apparent Power (VA)	±1% of range maximum
Active Energy (Wh)	Class 1 IEC62503-21
Reactive Energy (Varh)	±1% of range maximum
Response time to step input	1s, typical, to >99% of final reading at 50Hz

DMTI DG (III)MBR Specification

## Enviroments:

Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +70°C
Relative humidity	0 to 95%, non-condensing
Electostatic Discharges	15kV air gap IEC61000-4-2
ElectromagneticRF Fields	80~2000MHz IEC61000-4-3
Electrical Fast Transients	4kV IEC61000-4-4
Surge Test	4kV IEC61000-4-5
Conducted Disturbances	10kV IEC61000-4-6
Penetration of Dust & Water	IP51 IEC60529
Resistance to Heat & Fire	IEC60695-2-11

## Wiring Diagram:



To get more than a meter



# DMTI DG III MBR-THD

Three Phase Electronic Watt-Hour Meter - Modbus Multi Tariff-THD

## Application

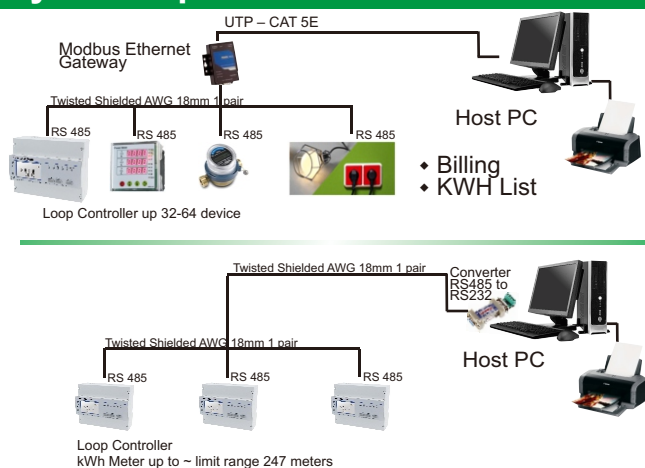
**DIGITAL METER TECHNOLOGY INTERNATIONAL**, Ltd produces **DMTI-DG(III)MBR-THD** is a multifunction meter that supports max 4 tariffs and 10 time segments, the tariffs and segments can be set via RS485 communication. The unit measures and displays the characteristic three phase four wires (3p4w) supplies, including voltage, frequency, current, power, active, reactive energy, imported or exported and Total Harmonic Distortion (THD). Energy is measured in terms of kWh, kVarh. Maximum demand current can be measured over present periods of up to 60 minutes. In order to measure energy, the unit requires voltage and current inputs in addition to the supply required to power the product.

DG III MBR-THD supports max. 100A direct connection, saves the cost and avoids the trouble to connect external CTs, giving the unit a cost-effective and easy operation. Built-in interfaces provide pulse and RS485-Modbus RTU outputs. Configuration is password protected. The meter is provided with a non-volatile memory system that ensures the readings are not lost or altered when power is off.

## Standard Features:

- ✓ 100A direct connect load
- ✓ Multi measurement: kWh, kVarh, THD, W, Var, PF, Hz, DMD, V, A, etc
- ✓ THD up to 31st of Voltage and current
- ✓ Bi-directional measurement
- ✓ Built-in RS485 Modbus™ RTU and Pulsed Output
- ✓ Supports max 4 tariffs, and 10 time segments
- ✓ User friendly menu navigation and set up

## System Operation

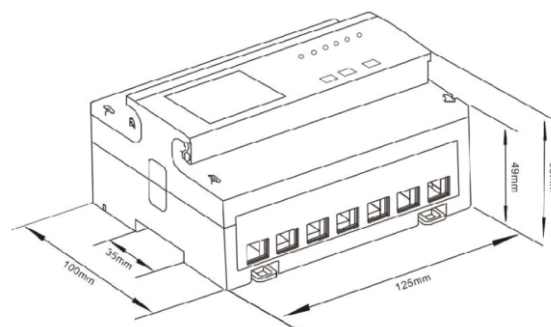


## DMTI DG(III)MBR - THD

Three Phase Modbus - Multi function  
Multi Tariff - THD



## Dimensions:



100mm (H) x 125mm (W) x 65mm (D)

## General Specifications:

Voltage	
Nominal Voltage Un	3x230V / 400VAC
Voltage Range	80% ~ 120% of Un
Current	
Basic Current (Ib)	1.5A (CT Connection)
	10A (Direct Connection)
Max. Current (Imax)	6A (CT Connection)
	100A (Direct Connection)
Starting Current	0.4% of Ib-Imax
Over current withstand	20 Imax for 0.01s
AC Voltage withstand	4kV for 1 minute
Impulse Voltage withstand	6kV~1.2μS waveform
Power consumption per phase	≤2W/ 10A
Burden of CT circuit	< 0.6VA/ Phase
Frequency	50 or 60Hz
Constant	1000imp/kWh (CT Connection)
	400imp/kWh (Direct Connection)
Time clock accuracy	< 1s/day
Tariff	4
Time Segment	10
Battery Voltage	3.6VDC, 1.2Ah
Display	LCD with backlight
Max. Reading	999999.99 kWh/kVarh

## Accuracy:

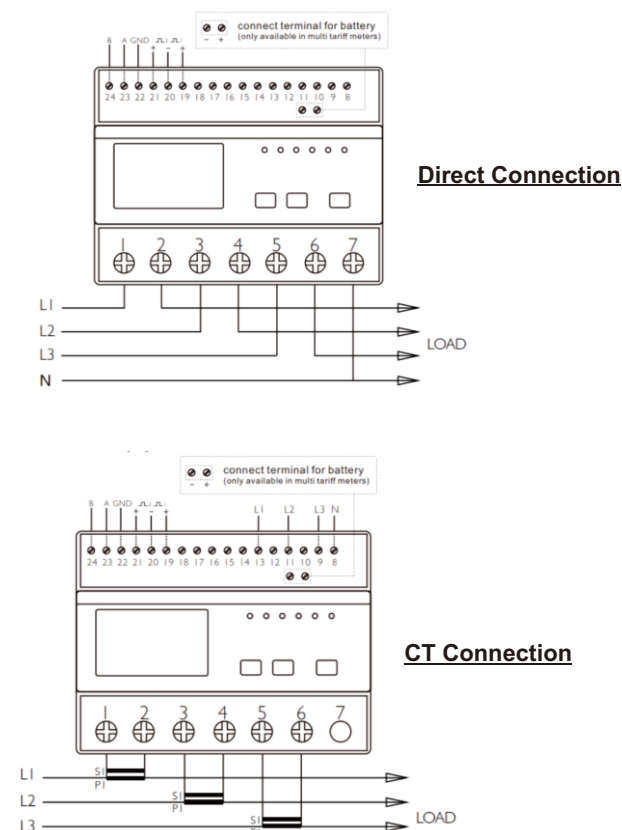
Voltage, Current	0.5% of range
Frequency	0.2% of mid-frequency
Power factor	1% of unity (0.01)
Active Power, Apparent Power	±1% of range maximum
Reactive Power (Var)	±1% of range maximum
Active Energy (Wh)	Class 1 IEC62503-21
Reactive Energy (Varh)	±1% of range maximum
Response time to step input	1s, typical, to >99% of final reading at 50Hz

DMTI DG (III)MBR-THD Specification

## Enviroments:

Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +70°C
Relative humidity	0 to 95%, non-condensing
Electostatic Discharges	15kV air gap IEC61000-4-2
Electromagnetic RF Fields	80~2000MHz IEC61000-4-3
Electrical Fast Transients	4kV IEC61000-4-4
Surge Test	4kV IEC61000-4-5
Conducted Disturbances	10kV IEC61000-4-6
Penetration of Dust & Water	IP51 IEC60529
Resistance to Heat & Fire	IEC60695-2-11

## Wiring Diagram:





DMTI

# DMTI DG(II)MBO

Single Phase PostPaid Remote Control Energy Meter

## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL (DMTI), Ltd** produces **DG(II)MBO** a single phase multifunction remote control direct connection meter. It has a built-in relay, you can turn on or off by remote control in front of your computer. Besides, it has alarm system, the relay will open automatically when the parameter reaches the alarm value.

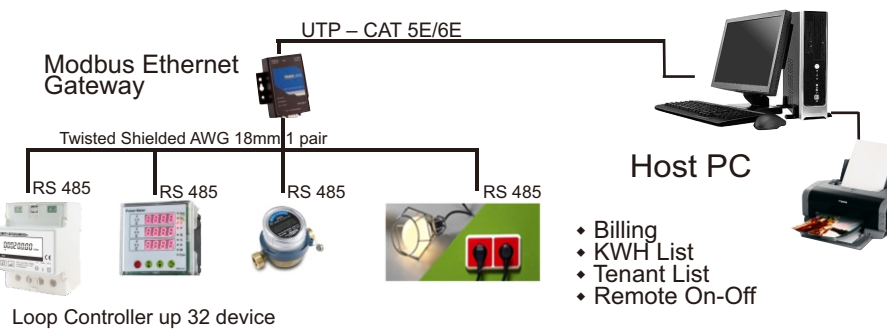
There are 6 types alarm object and alarm value you can set by RS485. **DG(II)MBO** measures and displays the characteristics of single phase two wires (1P2W) supplies, including voltage, current, frequency, power, active and reactive energy, imported and exported energy is measured in terms of kWh, kVArh. In order to measure energy, the unit requires voltage and current inputs in addition to the supply required to power the product.

**DG(II)MBO** supports max. 100A direct connection, saves the cost and avoid the trouble to connect external CTs, giving the unit a cost-effective and easy operation. Built-in interfaces provides pulse and RS485 Modbus RTU outputs. Configuration is password protected.

## Standard Features:

- ✓ Max.100A Direct Connect
- ✓ Multifunction Measurement (kWh, kVArh, kW, PF, Hz, V, A etc), Displays Scrollable Settings;
- ✓ Support AMR, SCADA system;
- ✓ Built-in Relay, Remote Control Switch;
- ✓ Alarm System;
- ✓ Provide RS485 port - Modbus RTU;
- ✓ Energy Resettable;
- ✓ White Backlit LCD Display;
- ✓ Din Rail Mounting 35mm;
- ✓ Better than Class 0.5s accuracy for active energy.

## System Operation

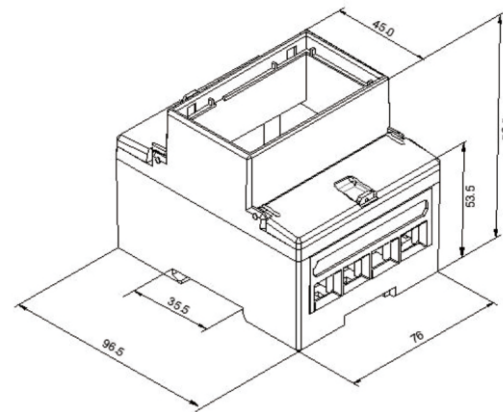


To get more than a meter

DMTI

**DMTI DG(II)MBO**  
*Single Phase Modbus - Remote On-Off*

## Dimensions



76mm (H) x 96.5mm (W) x 76.5mm (D)

DMTI

## General Specifications:

Voltage	
Nominal Voltage Un	230V
Voltage Range	80% ~ 120% of Un
Current	
Base current (Ib)	5A
Maximum current (Imax)	100A
Starting Current	0.4% of Ib
Power consumption	<2W/10VA
Frequency	
Nominal frequency fn	50 or 60Hz
Frequency range	45 - 65Hz
AC Voltage withstand	4KV for 1 minute
Impulse voltage withstand	6KV-1.2μs waveform
Over current withstand	30Imax for 0.01s
Pulse output rate	1000imp/kWh (default) 1000/100/10/1 imp/kWh (configurable)
Display	LCD with White Backlight
Max. Reading	999999.99kWh/kVArh

## Accuracy:

Voltage	±0.5%
Current	±0.5%
Frequency	±0.1%
Power Factor	±0.01
Active Power	±0.5%
Reactive Power	±1%
Apparent Power	±0.5%
Active Energy	IEC 62053-22 Class 0.5S
Reactive Energy	IEC 62053-23 Class 2

## Modbus:

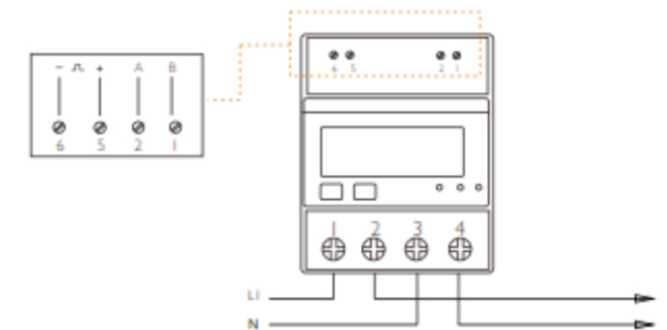
Bus Type	RS485
Protocol	Modbus RTU
Baud Rate	9600bps default
Parity	Even/Odd/None(default)
Address Range	1 - 247
Max. Bus Loading	1000m

DMTI DG (II)MBO Specification

## Enviroments:

Operating Humidity	≤90%
Storage Humidity	≤95%
Operating Temperature	-25°C ~ +55°C
Storage Temperature	-40°C ~ +70°C
Penetration of Dust&Water	IP51 (Indoor)
Altitude	≤ 2000m

## Wiring Diagram:



To get more than a meter



# DMTI DG II MBP

Single Phase Electronic Watt-Hour Meter - Modbus Prepaid

## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL**, Ltd produces **DMTI(II)MBP** single phase electronic prepaid energy meter. It is in full compliance with technical requirements of IEC62053-22 standard for class 0.5s energy meter. It has a complete prepaid management system, which is convenient for power purchase. The system automatically deducts fees according to electricity consumption. Recharging operation can be done through network remotely, no need any medium such as IC card. The meter has two-level balance alarm function and an emergency amount function. It will automatically stop power supply when tenant in arrears or credit become zero or reaching the pre-set value and the real-time monitoring the look whether there is any abnormal situation. The meter is with excellent reliability that can display remaining capacity, available remaining, total power consumption/purchase of electricity, credit line, overdraft consumption, load threshold, pay model, voltage, current, active power, active energy, import energy, export energy, power factor, frequency and time ect. The reactive power, apparent power can be read by Modbus.

**DG(II)MBP** is suitable for real-time power monitoring system and has the characteristics of multi-function, multi-purpose, high stability and long life. It has RS485 communication interface, support high speed communication function of RS485 (9600bps). It is an ideal choice for power energy monitoring.

## Standard Features:

- ✓ Max.100A Direct Connect
- ✓ Prepaid Recharged;
- ✓ Built-in Relay, Remote Control Switch;
- ✓ Alarm System;
- ✓ Provide Rs485 port - Modbus RTU;
- ✓ Energy Resettable;
- ✓ White Backlit LCD Display;
- ✓ Din Rail Mounting 35mm;
- ✓ Better than Class 1 / 0.5s accuracy for active energy.

## System Operation

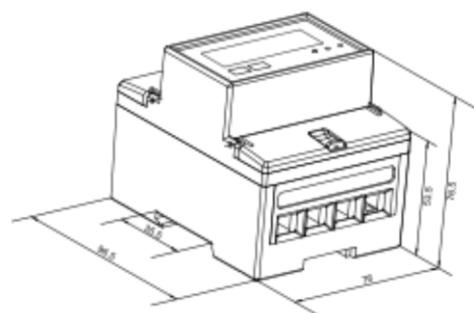


To get more than a meter

**DMTI DG(II)MBP**  
Single Phase Modbus - Prepaid



## Dimensions



76mm (H) x 96.5mm (W) x 76.5mm (D)

## General Specifications:

Voltage	
Nominal Voltage Un	230V
Voltage Range	80% ~ 120% of Un
Current	
Base current (Ib)	5A
Maximum current (Imax)	100A
Starting Current	0.4% of Ib
Power consumption	<2W/10VA
Frequency	
Nominal frequency fn	50 or 60Hz
Frequency range	45 - 65Hz
AC Voltage withstand	4KV for 1 minute
Impulse voltage withstand	6KV-1.2μs waveform
Over current withstand	30Imax for 0.01s
Pulse output rate	1000imp/kWh (default) 1000/100/10/1 imp/kWh (configurable)
Display	LCD with White Backlight
Max. Reading	999999.99kWh

## Accuracy:

Voltage	±0.5%
Current	±0.5%
Frequency	±0.1%
Power Factor	±0.01
Active Power	±0.5%
Reactive Power	±1%
Apparent Power	±0.5%
Active Energy	Class 1 / 0.5s
Reactive Energy	Class 2

## Modbus:

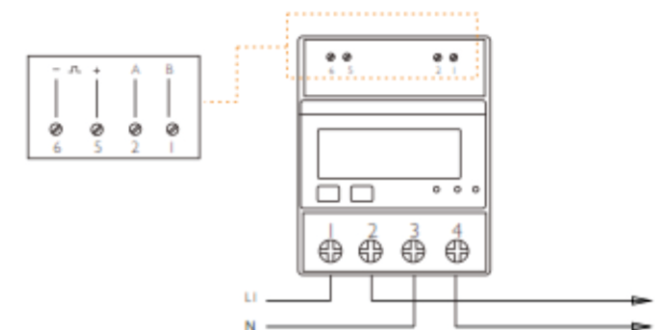
Bus Type	RS485
Protocol	Modbus RTU
Baud Rate	9600bps default
Parity	Even/Odd/None(default)
Address Range	1 - 247
Max. Bus Loading	1000m

DMTI DG (II)MBP Specification

## Enviroments:

Operating Humidity	≤90%
Storage Humidity	≤95%
Operating Temperature	-25°C ~ +55°C
Storage Temperature	-40°C ~ +70°C
Penetration of Dust&Water	IP51 (Indoor)
Altitude	≤ 2000m

## Wiring Diagram:



To get more than a meter



# DMTI DG III MBP

Three Phase Electronic Watt-Hour Meter - Modbus Prepaid

## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL**, Ltd produces **DMTI(II)MBP** single phase electronic prepaid energy meter. It is in full compliance with technical requirements of IEC62053-22 standard for class 0.5s energy meter. It has a complete prepaid management system, which is convenient for power purchase. The system automatically deducts fees according to electricity consumption. Recharging operation can be done through network remotely, no need any medium such as IC card. The meter has two-level balance alarm function and an emergency amount function. It will automatically stop power supply when tenant in arrears or credit become zero or reaching the pre-set value and the real-time monitoring the look whether there is any abnormal situation. The meter is with excellent reliability that can display remaining capacity, available remaining, total power consumption/purchase of electricity, credit line, overdraft consumption, load threshold, pay model, voltage, current, active power, active energy, import energy, export energy, power factor, frequency and time ect. The reactive power, apparent power can be read by Modbus.

**DG(II)MBP** is suitable for real-time power monitoring system and has the characteristics of multi-function, multi-purpose, high stability and long life. It has RS485 communication interface, support high speed communication function of RS485 (9600bps). It is an ideal choice for power energy monitoring.

## Standard Features:

- ✓ Max.100A Direct Connect
- ✓ Prepaid Recharged;
- ✓ Built-in Relay, Remote Control Switch;
- ✓ Alarm System;
- ✓ Provide Rs485 port - Modbus RTU;
- ✓ Energy Resettable;
- ✓ White Backlit LCD Display;
- ✓ Din Rail Mounting 35mm;
- ✓ Better than Class 1 / 0.5s accuracy for active energy.

## System Operation

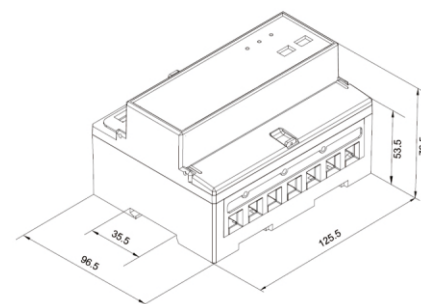


To get more than a meter

**DMTI DG(III)MBP**  
Three Phase Modbus - Prepaid



## Dimensions



96.5mm (H) x 125.5mm (W) x 76.5mm (D)

## General Specifications:

Voltage	
Nominal Voltage Un	3x230/400VAC
Operational Voltage	85 - 276VAC
Current	
Base current (Ib)	5A
Maximum current (Imax)	100A
Starting Current	0.4% of Ib
Power consumption	<2W/10VA
Frequency	
Nominal frequency fn	50 or 60Hz
Impedance	<1mΩ
AC Voltage withstand	4KV for 1 minute
Impulse voltage withstand	6KV-1.2μs waveform
Over current withstand	30Imax for 0.01s
Pulse output rate	1000imp/kWh (default) 1000/100/10/1 imp/kWh (configurable)
Display	LCD with White Backlight
Max. Reading	999999.99kWh

## Accuracy:

Voltage	±0.5%
Current	±0.5%
Frequency	±0.1%
Power Factor	±0.01
Active Power	±0.5%
Reactive Power	±1%
Apparent Power	±0.5%
Active Energy	Class 1 / 0.5s
Reactive Energy	Class 2

## Modbus:

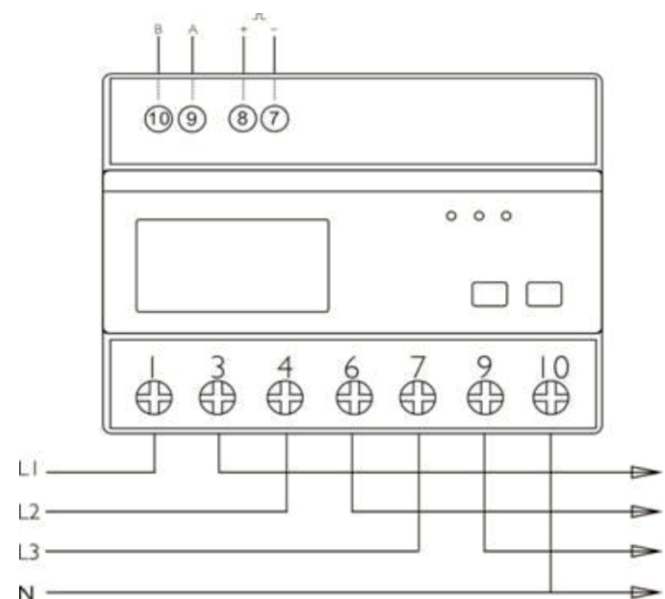
Bus Type	RS485
Protocol	Modbus RTU
Baud Rate	9600bps default
Parity	Even/Odd/None(default)
Address Range	1 - 247
Max. Bus Loading	1000m

DMTI DG (II)MBP Specification

## Enviroments:

Operating Humidity	≤90%
Storage Humidity	≤95%
Operating Temperature	-25°C ~ +55°C
Storage Temperature	-40°C ~ +70°C
Penetration of Dust&Water	IP51 (Indoor)
Altitude	≤ 2000m

## Wiring Diagram:



To get more than a meter

# DMTI DG II-PP

Single Phase Electronic Watt-Hour Meter IC - Card Prepayment

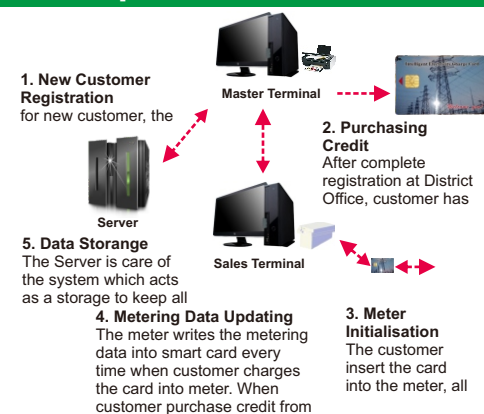
## Application

DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd produces Prepaid watt-hour meter DMTI - DG II-PP single phase which is completely accord with technical specification of class of International Standard IEC61036-2000 and Nation Standard GB/T 18460.3-2001. This meter uses IC card as media purchased electricity and will works as long as purchased electricity values available. The consumer must load IC card from Vending Machine provided by Management Building and then insert the IC card into the watt-hour meter. This product can be installed indoors or in meter box outdoors, have features with excellent long-term reliability, small volume, light weight, perfect appearance, easy installation, etc.

## Standard Features:

- ✓ Surface mounting or hang type and din rail (optional) installation.
- ✓ 5+1 digits display cumulative electricity and rest electricity in turn.
- ✓ Each unit provides with IC Card to re-loading energy purpose.
- ✓ IC Card is with data encryption and anti-fake protection.
- ✓ It integrates full-digital metering with using electricity power consuming display, prepayment control, reading card and intelligent anti-power stolen, ect. Has high reliability.
- ✓ When the residual electric quantity reaches the warning value, the watt-hour meter would display symbol flickeringly, and would switch off automatically after a certain period of time delay.
- ✓ When the residual electric quantity in watt-hour meter remains zero, the watt-hour meter would trip automatically, and cut off the power supply.

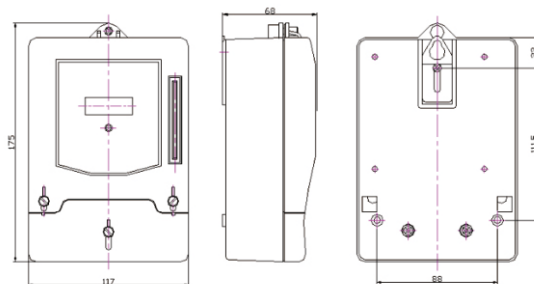
## System Operation



**DMTI DG II-PP**  
Single Phase IC-Card Prepayment



## Dimensions



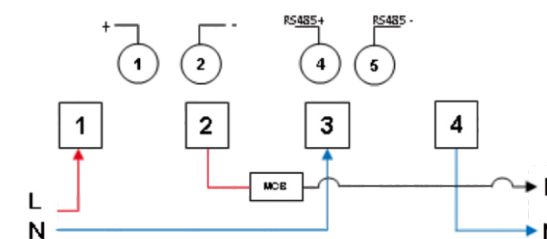
**175mm (H) x 117mm (W) x 68mm (D)**

## Electrical parameters:

Reference Voltage	220V
Frequency	50Hz
Current	
Basic current (I <sub>b</sub> )	5A
Maximum current (I <sub>max</sub> )	50A
Starting current (I <sub>st</sub> )	0.4%I <sub>b</sub>
Active energy constant	1600imp/kWh
Measurement Accuracy	
Active energy to IEC62053-21	Class 1.0
Power consumption	<2W
Insulation performance	AC Voltage 4kV for 1 minute, 1.2/50μs waveform impulse voltage 6kV
Ambient condition	
Standard working temperature	-20°C to +45°C
Limit working temperature	-30°C to +55°C
Relative humidity	≤85%

*DMTI DG II-PP Specification*

## Wiring Diagram



For further information, please contact:  
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Email: sales@mam-corporation.com  
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# DMTI DG III-PP

Three Phase Electronic Watt-Hour Meter IC - Card Prepayment

## Application

DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd produces Prepaid watt-hour meter DMTI - DG III-PP which is measure the active energy consumption on three phase AC power grid of rated frequency 50Hz or 60Hz, complying with Standards IEC 62053-21 and IEC 62052-11. Have the functions of load control, automatic detection and indication of fault. Standard configuration is without the detection function of opening terminal cover. When ordering, you can add the function: while opening terminal cover, the power will be cut. DMTI DG III-PP can select the meter suitable for both reloadable IC card and disposable IC card. To load, please let both IC card programmer and the computer on line. It is also available to load via the separate offline IC card programmer.

## Standard Features:

- ✓ 6 digits LED or 7 digits LCD display for option.
- ✓ Prepayment mode is by kWh. Another mode by credit is for option when ordering.
- ✓ Standard configuration of prepayment management system software is a single computer version.
- ✓ LEDs indicate the power supply state, energy impulse signal and the load current flow direction separately.
- ✓ Front panel mounted in 3 points for fixing. The centre-to-centre distance between the top mounting holes and the bottom, which the user can select any needed distance, in accordance with Standards BS 7856 and DIN 43857.
- ✓ Beige flame retardant PC/ABS meter case and internal structure parts and the Class II insulation protection design, with the characteristics of moistureproof, flame retardant, thermostability, good weather resistance, high rigidity and excellent insulation property, etc., to ensure a longer service life and a more stylish appearance.

### DMTI DG III-PP

Three Phase IC-Card Prepayment

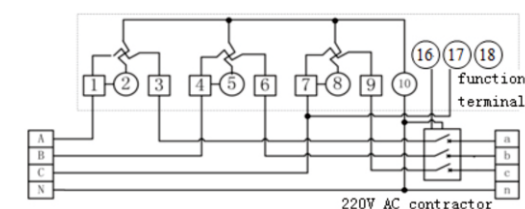


## Electrical parameters:

Reference Voltage	3 x 220/380VAC
Frequency	50Hz
Current	
Basic current (Ib)	10A
Maximum current (Imax)	100A
Starting current (Ist)	0.04A
Active energy constant	400imp/kWh
Measurement Accuracy	
Active energy to IEC62053-21	Class 1.0
Power consumption	<2W
Insulation performance	AC Voltage 4kV for 1 minute, 1.2/50μs waveform impulse voltage 6kV
Ambient condition	
Standard working temperature	-20°C to +45°C
Limit working temperature	-30°C to +55°C
Relative humidity	≤ 85%

DMTI DG III-PP Specification

## Wiring Diagram



# DMTI DG II-PPT

STS Prepayment Token Single Phase Electronic Watt-Hour Meter

## Application

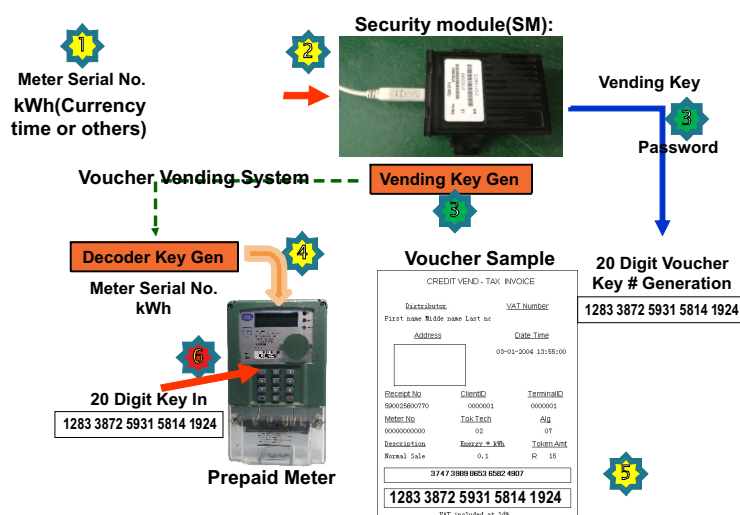
**DIGITAL METER TECHNOLOGY INTERNATIONAL** Ltd, produces Prepaid watt-hour meter **DMTI DG II-PPT** single phase which is completely accord with technical specification of Standard Transfer Specification (STS) encryption protocol which comply to International Standard IEC 62055-31, IEC 62055-41, IEC 62052-11, IEC 62053-21, IEC 62056-21. Credit and management protocol is transferred from point of sales (POS) to the meter via a 20-digit numeric token which generated using the Standard Transfer Specification (STS) encryption protocol and entered into meter via keypad.

**DMTI DG II-PPT** single phase is robust and reliable, offering innovative functional features with modern design. The meter can be installed inside the home making it accessible for consumer to enter in a credit token. Beside STS energy meter, we also provide STS water meter and gas meter.

## Standard Features:

- ✓ 20 digit (Standard Transfer Specification) STS encryption
- ✓ Detection of significant reverse energy (SRE)
- ✓ IEC62056-21 compliant optical & RS485 port (optional) allowing for easy data interrogation
- ✓ Disconnects on overload and no credit
- ✓ Programmable load limit and low credit warning
- ✓ Detection and record tamper event such as opening cover, reverse connection, black-out
- ✓ Easy access to 12 months historical consumption data and last 5 token entered
- ✓ Advance tamper detection
- ✓ Meter shell Protection Rate IP 54
- ✓ Indoor or outdoor wall-mounted

## System Operation



**DMTI DG II-PPT**  
Single Phase STS Prepayment-Token



## Dimensions



215mm (H) x 130mm (W) x 65mm (D)

## Electrical parameters:

Voltage	
Nominal Voltage Un	230V
Limited Voltage	70% ~ 120%Un
Frequency	
Nominal frequency fn	50-60Hz
Tolerance	5%
Current	
Basic current (Ib)	5A
Maximum current (Imax)	60A
Starting current (Ist)	20mA
Active energy constant	1600imp/kWh
Measurement Accuracy	
Active energy to IEC62053-21	Class 1.0
Burden	
Voltage circuit	<2W <8VA
Current circuit	<1VA
Temperature range	
Operation meter	-25°C to +70°C
Storage	-40°C to +85°C

## Insulation:

Insulation level	4kV rms 1min
Voltage impulse withstand	8kV 1.2/50μs
Insulation System Classification	Protective Class II

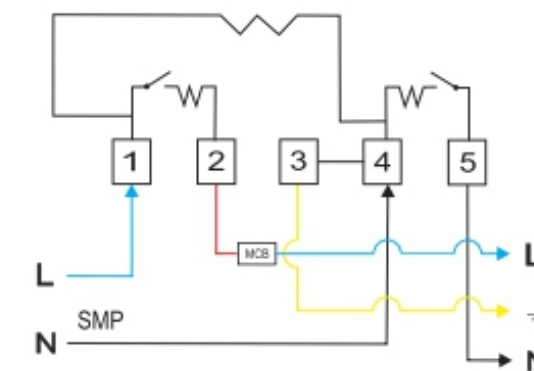
## Electro Magnetic Compatibility

Electrostatic discharges	
Contact discharge	8kV
Air discharge	16kV
Electromagnetic RFfields	
27MHz to 500MHz typical	10V/m
100kHz to 1GHz typical	30V/m
Fast transient burst test	4kV

## Mechanical requirements:

Meter shell Protection Rate	IP54
Protection	Class II

## Wiring Diagram





# DMTI DG Basic - LCD

Single & Three Phase Electronic Watt-Hour Meter Basic - LCD

## Application

DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd produces **DMTI - DG (II) and (III) B Single and Three Phase Basic** electronic watt-hour meter, They adopt many advanced technologies of research and development, like microelectronic-techniques, specialized large-scale IC (integrated circuit), digital sampling and processing technology, SMT technique, and so on. Their technical performances completely conform to International Standards IEC 62053-21 for Class 1 single and three phase active energy meter. They can directly and accurately measure the load active energy consumption in the single and three phase AC networks of rated frequency 50Hz or 60Hz. The DG Basic have multiple types for option, to be suitable with the various market demands. They have features with excellent long-term reliability, small volume, light weight, perfect appearance, easy installation, etc.

## Standard Features:

- ✓ 6+1 digits (999999.1kWh) LCD display.
- ✓ 35mm DIN standard rail installations in front of panel are available.
- ✓ 6 pole width (modulus 12.5mm) for single phase meter, and 10pole width (modulus 12.5mm) for three phase meter complying with Standards JB/T7121-1993.
- ✓ Single pole width (modulus 17.5mm) for Smallest single phase meter, complying with standards DIN43880.
- ✓ For Smallest single phase meter, automatic detection the direction of the flow of load current. And Instructions on LED (when display HELP 1 on LCD, that means the reverse of the flow of load current).
- ✓ Two or Four LEDs to indicate separately the power state (green) and the energy impulse signal (red).
- ✓ Measure the active energy consumption in one direction on single phase two wire, which is not related with the load current flow direction at all, complying with Standards IEC 62053-21.
- ✓ Equipped with a polarity passive energy impulse output terminal, conforming to Standards IEC 62053-31 and DIN 43864.
- ✓ Automatic detection for the load current flow direction and will be indicated by LED.
- ✓ Infrared carrier wave communication and RS485 serial port communication are available.

### DMTI DG II-B LCD

Single Phase Basic LCD



### DMTI DG II-BC LCD

Single Phase Basic Compact LCD



### DMTI DG II-MC RS -LCD

Single Phase Basic Rs485 - LCD



### DMTI DG III-B LCD

Three Phase Basic LCD



### DMTI DG III-MC RS LCD

Three Phase Basic Rs485 - LCD



## Electrical parameters:

### DG II B LCD - Single Phase

Nominal Voltage (Un)	220VAC
Operational Voltage	161 ~ 300VAC

### Current

Basic current (Ib)	5A / 10A / 20A
Maximum current (Imax)	32A / 50A / 100A
Operational current range	0.05Ib ~ Imax

Starting current range 0.004Ib

Internal Power consumption ≤ 2W / 10VA

### DG III B LCD - Three Phase

Nominal Voltage (Un)	3x220VAC / 380AC
Working Voltage Limit	70 ~ 130% Un

### Current

Basic current (Ib)	10A / CT
Maximum current (Imax)	50A / 100A / 5A
Starting current range	0.004Ib(Direct), 0.002 (CT)

Internal Power consumption ≤ 2W / 10VA / phase

Test Output flash rate 1600imp/kWh

Operational Frequency range 50Hz ±10%

### Insulation Capabilities

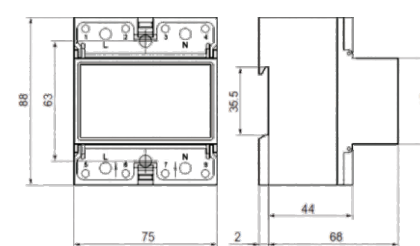
- AC Voltage withstand	4kV for 1 minute
- Impulse Voltage withstand	6kV - 1.2/50μs waveform

### Performance Criteria

Operating Humidity	≤ 85%
Operating temperature	-10°C to +50°C
Storage temperature	-30°C to + 65°C
Class	1

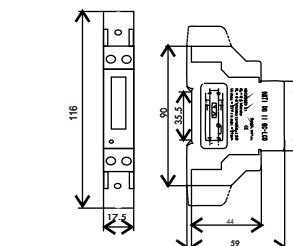
DMTI DG B LCD Specification

## Dimensions:



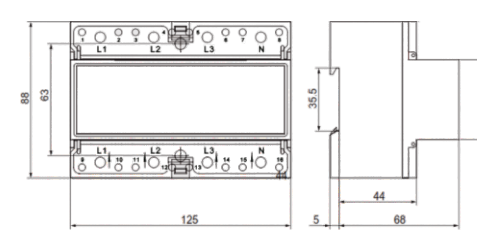
83mm (H) x 75mm (W) x 68mm (D)

DMTI DG II-B LCD



116mm (H) x 17.5mm (W) x 59mm (D)

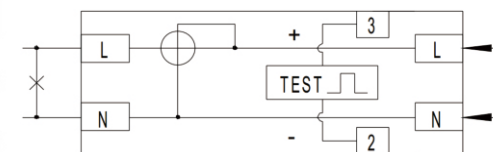
DMTI DG II-BC LCD



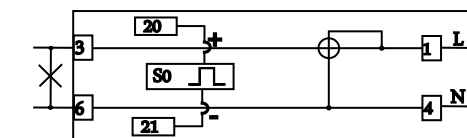
88mm (H) x 125mm (W) x 68mm (D)

DMTI DG III-B LCD

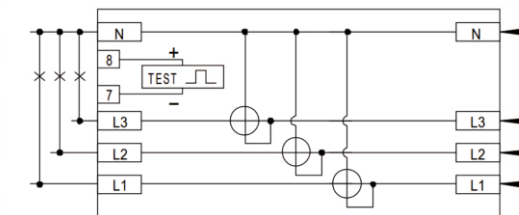
## Wiring Diagram



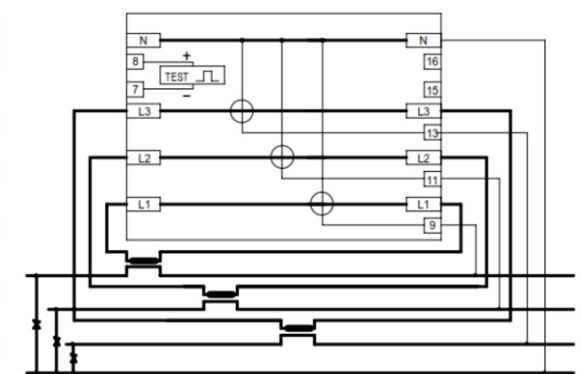
DMTI DG II-B LCD



DMTI DG II-BC LCD



DMTI DG III-B LCD- Direct Connection



DMTI DG III-B LCD- CT Connection



# DMTI DG Basic - MC

Single & Three Phase Electronic Watt-Hour Meter Basic - Mechanical Counter

## Application

DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd produces **DMTI - DG (II) and (III) B Single and Three Phase Basic** electronic watt-hour meter, They adopt many advanced technologies of research and development, like microelectronic-techniques, specialized large-scale IC (integrated circuit), digital sampling and processing technology, SMT technique, and so on. Their technical performances completely conform to International Standards IEC 62053-21 for Class 1 single and three phase active energy meter. They can directly and accurately measure the load active energy consumption in the single and three phase AC networks of rated frequency 50Hz or 60Hz. The DG Basic have multiple types for option, to be suitable with the various market demands. They have features with excellent long-term reliability, small volume, light weight, perfect appearance, easy installation, etc.

## Standard Features:

- ✓ Available as 35mm DIN standard rail mounted, conforming to Standards DIN EN 50022, as well as front PANEL mounted (the center distance between two mounting holes is 63mm). Two mounted methods above are optional for user.
- ✓ Two or Four LEDs to indicate separately the power state (green) and the energy impulse signal (red).
- ✓ Measure the active energy consumption in one direction on single phase two wire, which is not related with the load current flow direction at all, complying with Standards IEC 62053-21.
- ✓ Can select the step motor impulse register of 6 digits (999999kWh)
- ✓ May select normal and simple connection.
- ✓ 6+1 digits (999999.1kWh) LCD display.

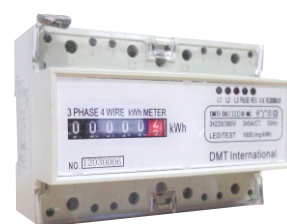
### DMTI DG II-B MC

Single Phase Basic Mechanical Counter

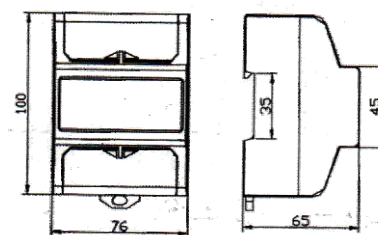


### DMTI DG III-B MC

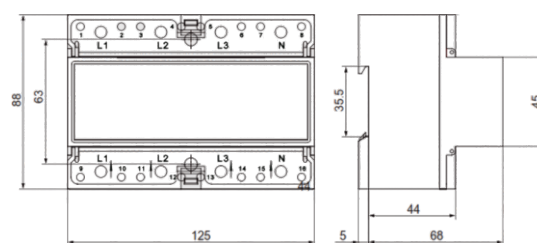
Three Phase Basic Mechanical Counter



## Dimensions



100mm (H) x 76mm (W) x 65mm (D)  
DMTI DG II-B MC



88mm (H) x 125mm (W) x 68mm (D)  
DMTI DG III-B MC

## Electrical parameters:

### DG II B MC - Single Phase

Nominal Voltage (Un)	220VAC
Operational Voltage	161 ~ 300VAC

### Current

Basic current (Ib)	5A / 10A / 20A
Maximum current (Imax)	50A / 100A
Operational current range	0.05Ib ~ Imax
Starting current range	0.004Ib
Internal Power consumption	≤2W / 10VA

### DG III B MC - Three Phase

Nominal Voltage (Un)	3x220VAC / 380AC
Working Voltage Limit	70 ~ 130% Un

### Current

Basic current (Ib)	10A / CT
Maximum current (Imax)	50A / 100A / 5A
Starting current range	0.004Ib(Direct), 0.002Ib (CT)
Internal Power consumption	≤ 2W / 10VA / phase
Test Output flash rate	1600imp/kWh
Operational Frequency range	50Hz ±10%

### Insulation Capabilities

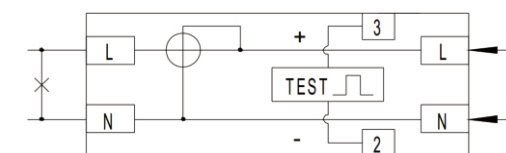
- AC Voltage withstand	4kV for 1 minute
- Impulse Voltage withstand	6kV - 1.2/50μs waveform

### Performance Criteria

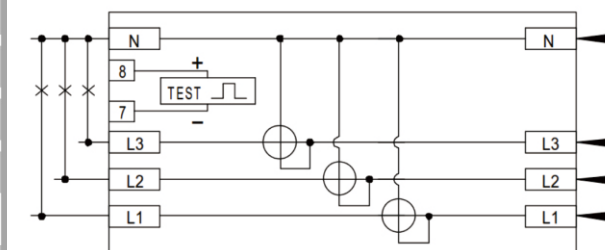
Operating Humidity	≤ 85%
Operating temperature	-10°C to +50°C
Storage temperature	-30°C to + 65°C
Class	1

DMTI DG B MC Specification

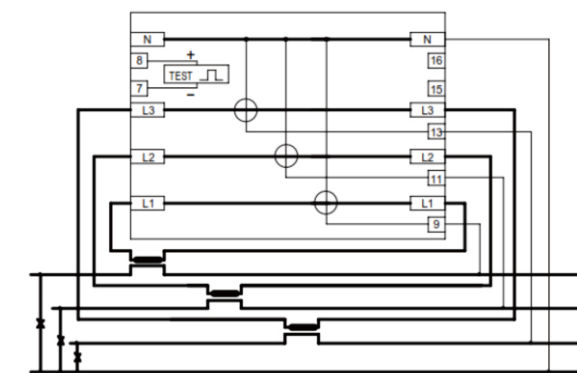
## Wiring Diagram



DMTI DG II-B MC



DMTI DG III-B MC- Direct Connection



DMTI DG III-B MC- CT Connection



# DMTI DG Basic - Disc

Single & Three Phase Electronic Watt-Hour Meter Basic - Disc

## Application

DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd produces **DMTI - DG (II) and (III) B-Disc Single and Three Phase** two wire & four wire electromechanical active energy meters, Their designs are fully absorbing the new technologies of electromechanical meters from home and abroad. Their technical performances completely comply with International Standards IEC 62053-11 for Class 2 single phase active energy meter. They can directly and accurately measure the load active energy consumption in the single phase & three AC networks of rated frequency 50Hz or 60Hz. They are mounted in the meter box indoors or outdoors. The DMTI DG B-Disc are novel design, reasonable structure, with the drum-type mechanical register to indicate the active power consumption. They have multiple configurations for option, to be suitable with the various market demands. They have features of high overload, low power loss, long durability & perfect appearance.

## Standard Features:

- ✓ Front panel mounted in 3 points for fixing, the appearance and dimensions are in Standard configuration is:  
5+1 digits drum-type mechanical register. You can select 4+1 digits register when ordering.
- ✓ Standard configuration is: no anti-reverse device. You can add the anti-reverse device when ordering.
- ✓ Standard configuration is: no handle. You can add a handle easy to carry when ordering.
- ✓ Single element measures single phase two wire active energy consumption, conforming to Standards IEC 62053-11.
- ✓ Measure the active energy consumption in one direction on three phase four wire, conforming to Standards IEC 62053-11.
- ✓ accordance with Standards BS 7856 and DIN 43857.

### DMTI DG II-B Disc

Single Phase Basic Mechanical - Disc

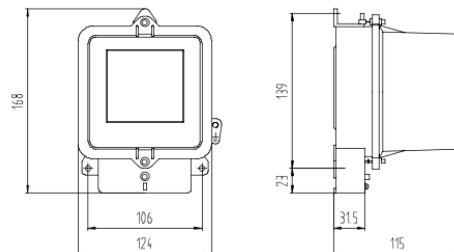


### DMTI DG III-B Disc

Three Phase Basic Mechanical - Disc

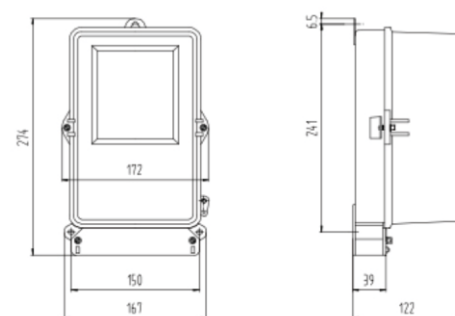


## Dimensions



168mm (H) x 106mm (W) x 115mm (D)

DMTI DG II-B Disc



274mm (H) x 167mm (W) x 122mm (D)

DMTI DG III-B Disc

## Electrical parameters:

### DG II B Disc - Single Phase

Nominal Voltage (Un)	220VAC
Operational Voltage	161 ~ 300VAC

### Current

Basic current (Ib)	5A / 10A
Maximum current (Imax)	50A / 20A / 60A
Operational current range	0.05Ib ~ Imax

Starting current range 0.005Ib

Insulation test voltage 2kV

Loss of voltage in voltage coil 1.1W

### DG III B Disc - Three Phase

Nominal Voltage (Un) 3x220VAC / 380AC

Working Voltage Limit 70 ~ 130% Un

### Current

Basic current (Ib)	10A / CT
Maximum current (Imax)	50A / 100A / 5A
Starting current range	0.005Ib(Direct), 0.003Ib(CT)

Internal Power consumption ?2W / 10VA / phase

Test Output rate 200/300/600 Revs/kWh

### Insulation Capabilities

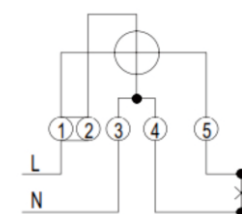
- AC Voltage withstand	2kV for 1 minute
- Impulse Voltage withstand	6kV - 1.2/50μs waveform

### Performance Criteria

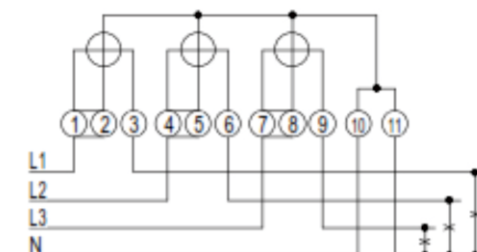
Operating Humidity	?85%
Operating temperature	-10°C to +50°C
Storage temperature	-30°C to + 65°C
Class	2

DMTI DG B Disc Specification

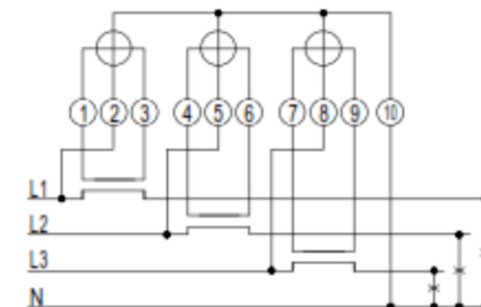
## Wiring Diagram



DMTI DG II-B Disc



DMTI DG III-B Disc- Direct Connection



DMTI DG III-B Disc- CT Connection

# DMTI - (PM) X96-5J

Smart Multifunction Power Analyser

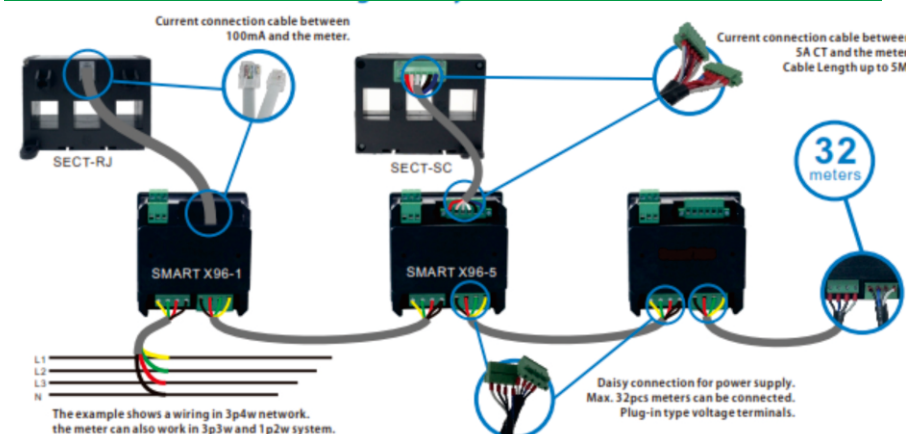
## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL**, Ltd produces **DMTI - (PM) X96-5J** digital power meter, is a top new-generation intelligent panel meter with built-in interfaces provides RS485, Modbus RTU and Ethernet TCP/IP communication. Digital input and outputs are provided for external signal counting and external device control. 30 type's parameters can be set for alarm. This series is widely used not only in the electricity transmission and power distribution system, but also in the power consumption measurement and analysis in LV/MV Intelligent power grid. The Unit can be used as a gateway for Modbus RTU/TCP. The (PM) X96-5J measures and displays the characteristics of 1P2W, 3P4W and 3P3W supplies, including voltage, frequency, current, power and active and reactive energy, imported or exported, Harmonic, Power factor, Max. Demand etc. Energy is measured in terms of kWh, kVarh and kVAh. Maximum demand current can be measured over preset periods of up to 60minutes. The (PM) X96-5J can be configured to work with a wide range of CTs and PTs, giving the unit a wide range of operation.

## Standard Features:

- ✓ Multi - parameter Measurements
- ✓ Up to 63 THD and IHD
- ✓ RS485 Modbus RTU
- ✓ Ethernet TCP Gateway
- ✓ Multi - tariffs
- ✓ Digital Input / Output
- ✓ Accuracy Class 0.5s / 0.2s
- ✓ Bar Graph for Power Indication
- ✓ Backlit LCD Display for Full Viewing Angles
- ✓ Push - in Installation and Plug- in Connection

## "Plug-in Play Solution"

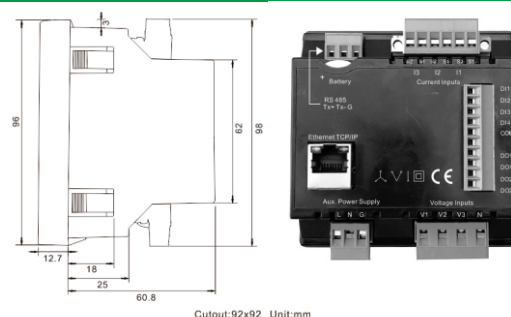


## DMTI (PM) X96-5J

Smart Multifunction Power Analyser

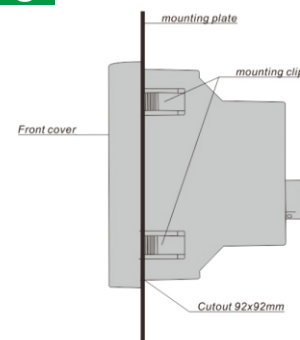


## Dimensions



96mm (H) x 98mm (W) x 60.8mm (D)

## Mounting



## Battery Replacement



## Electrical Characteristics:

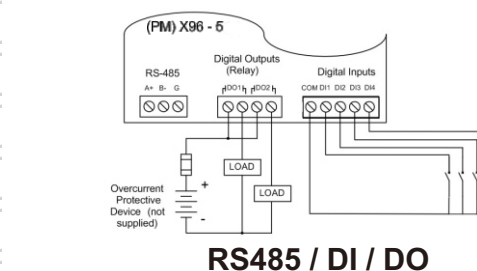
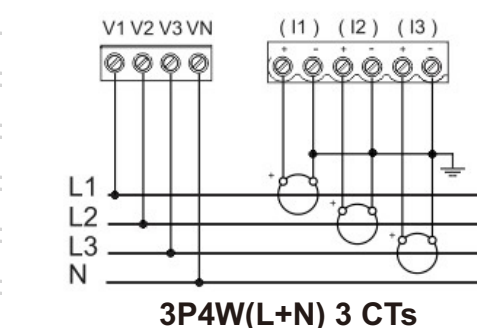
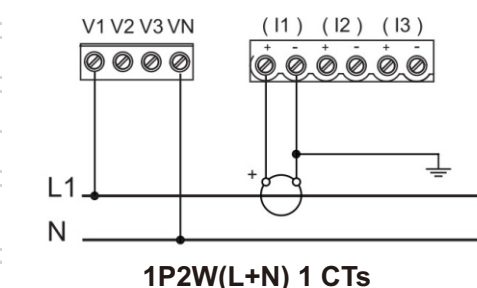
Type of measurement	RMS including harmonics on 3phase AC system (3P, 3P+N)128 samples per cycle
<b>Input-Voltage</b>	
Input-Voltage	100~500000V ac
Un	230 V L-N
Measured Voltage with Over-range & Crest Factor	100 to 480VAC L-L 100 to 276Vac L-N
Permanent Overload	490V L-L 280V L-N
Impedance	1M O
Frequency Range	45~66Hz
<b>Input- Current</b>	
CT Ratings	Primary: 1~9999A Secondary: 1A / 5A
Measured current with Over-range & Crest Factor	5mA~6A
Withstand	Continuous 8A 120A for 0.5Seconds
Frequency Range	45~66Hz
Burden	<0.036VA at 6A
<b>Auxiliary Power Supply</b>	
Operating Range	65~480V AC / 80~660V DC
Power Consumption	< 7VA/3.5W
Frequency	45 to 65 Hz
<b>Digital output</b>	
Number/Type	2 - electromagnetic relay
Output Frequency	1 Hz maximum
Switching Current	250VAC at 3.0 Amps,100kcycles
Isolation	2.5kV AC for 1min
<b>Digital input</b>	
Number	4
Input Resistance	10kO
Maximum Frequency	1kHz
Response Time	10 milliseconds
Isolation	2.5 KVAC for 1min

DMTI (PM) X96-5J Specification

## Measurement accuracy:

Power	IEC 61557-12 Class 0.5
Active Energy	IEC 62053-22 Class 0.5S/0.2S IEC 61557-12 Class 0.5
Reactive Energy	IEC62053-23 Class 2 IEC61557-12 Class 2
Frequency	±0.1%
Current	±0.2%
Voltage	±0.2%
Power Factor	±0.01
Harmonic Distortion	2

## Wiring Diagram:



To get more than a meter



# DMTI DG - WMB Modbus

Photoelectric Direct-reading Remote-transmitting Water Meter

## Application

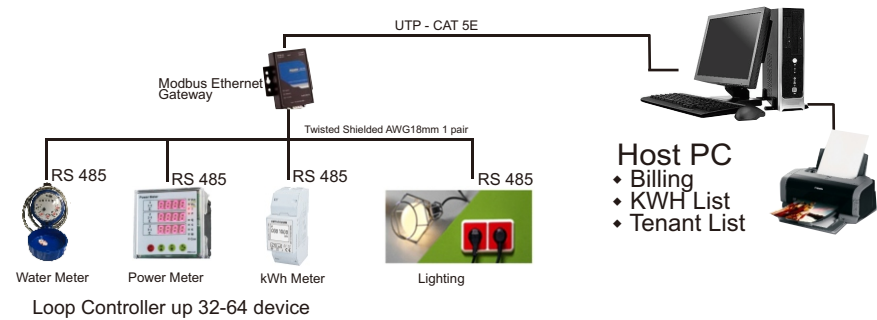
DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd produces photoelectric direct-reading remote-transmitting water meter is a measuring device used to measure the total water volume of the water flowing through the pipeline. It is applicable for small-scale industrial water and household water. This water meter features by large measurement range and high precision. Its measuring properties and other functions are able to meet with the Level-2 accuracy standard prescribed in GB/T 778.1~3—2007 national standard.

**DG-WMB series** photoelectric direct-reading remote-transmitting water meter reads the print-wheel data using the photoelectric direct-reading technology. Compared to traditional pulse meter, its metering error is reduced to zero. It is also an electronic remote-transmitting water meter that achieves zero electro-mechanical transformation error in the automatic meter reading system. Adopting a low-power-consumption design, apart from meter reading and valve operation, otherwise it requires no power supply.

## Standard Features:

- ✓ Direct-reading of the print-wheel data. Compared to traditional pulse water meter, it may reduce the reading error to zero;
- ✓ It requires no power supply. During meter reading or switching on/off the valve, with the bus supply power, it acquires and transfers data and achieves valve control according to the given instructions;
- ✓ Use of advanced date coding and verification method to ensure reliable communication;
- ✓ Marked with exclusive address ID, through which we can read the meter data and ensure the exclusiveness and accuracy of the data;
- ✓ Compliance with the design requirements of EMC, ESD, and EMI on electromagnetic compatibility of electronic products, reaching leading industrial level;
- ✓ Connected with the host computer, it has been equipped with remote automatic meter reading management system to achieve fully automatic meter reading;
- ✓ The installation environment is of B grade;
- ✓ The electromagnetic environment is of E1 grade.

## System Operation



DMTI DG-WMB  
Water Meter - Modbus



## Technical Parameters:

Nominal diameter (mm)		DN15	DN20	DN25	DN40
Pipe length(mm)	L(mm)	165	190	225	245
	W(mm)	95	95	110	125
	H(mm)	110	110	115	155
Range ratio ( $Q_3/Q_1$ )		$\leq 250$			
Overload flow $Q_4(m^3/h)$		3.125	5	7.875	20
Normal flow $Q_3(m^3/h)$		2.5	4	6.3	16
Divide flow $Q_2(m^3/h)$		0.04	0.064	0.1008	0.256
Min flow $Q_1(m^3/h)$		0.025	0.04	0.063	0.16
Flow maximum reading( $m^3$ )		99999			
Accuracy level		Class 2			
Allowed working pressure (Mpa)		$\leq 1.6MPa$			
Working enviroment		$-25-50^{\circ}C$			
Temperature class		T30 T50 T70 (default is T30)			
Resolution ratio		$0.0001m^3$			
Communication method		Modbus /RS485			
Power		3.6V 4000mAh (more than 10 years)			
Power comsumption		$\leq 15\mu A$			
Protection class		IP68			
Installation mode		Horizontal or vertical installation			
Installation position		Inlet pipe (outlet can choose)			

DMTI DG - WMB Specification

# DMTI - GS Modbus

Modbus Gas Meter

## Application

**DIGITAL METER TECHNOLOGY INTERNATIONAL, Ltd** produces Modbus Gas meter is a widely applicable to the measurement of natural gas, artificial gas, liquefied petroleum gas, etc.

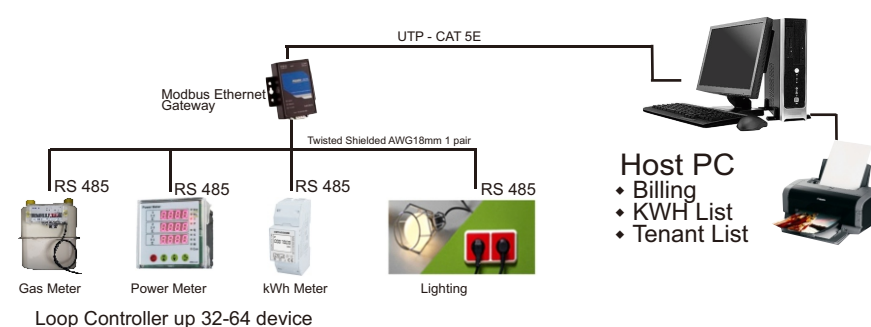
The machine uses engineering plastics, rust-proof aluminum, stainless steel and other materials to achieve the purpose of anti-magnetism.

The meter support Modbus protocol, combined with the meter reading system to establish a remote automatic meter reading management system to truly realize meter reading automation.

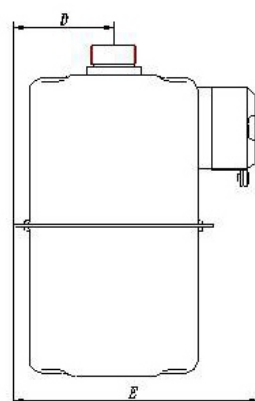
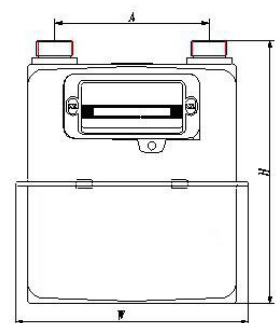
## Standard Features:

- ✓ The quality and performance indicators are in full compliance with the national standard GB/T6968-2011.
- ✓ The product uses the pressure difference between the air inlet and the air outlet to push the diaphragm and generate continuous motion through the double crank rocker mechanism to achieve accurate measurement of the gas volume.
- ✓ The civil steel shell series is a separate movement type structure. The outer casing is made of high-quality cold-rolled steel plate, which has excellent shell topcoat performance, strong adhesion, and good resistance to deformation and corrosion.
- ✓ The rotary slide valve is adopted, the friction coefficient is small, and the sensitivity is high; the valve seat and the rotary valve are made of synthetic resin such as high-grade phenolic, and the wear resistance is higher.
- ✓ Connected with the host computer, it has been equipped with remote automatic meter reading management system to achieve fully automatic meter reading;

## System Operation



**DMTI GS-MB**  
Gas Meter - Modbus



224mm (H) x 195mm (W) x 67mm (D) x 130 (110)mm (A),  
1.9Kg (Weight)

## Technical Parameters:

Items		Unit	GS1.6	GS2.5	GS4
Nominal flow		m³/h	1.6	2.5	4
Maximum flow		m³/h	2.5	4	6
Minimum flow		m³/h	0.016	0.025	0.040
shell material		Steel ST18/ Aluminum			
Inlet and outlet center spacing		mm	130(110)		
Total pressure loss		Pa	<200		
Working pressure range		kPa	0.5~50		
Per revolution volume		dm³	1.2		
Allowable error	Qmin=Q<0.1Qmax	%	±3		
	0.1Qmax=Q=Qmax	%	±1.5		
Counter minimum reading		dm³	0.2		
Counter maximum reading		m³	99999.999		
Working temperature		℃	-10~+40		
Storage temperature		℃	-20~+50		
Connecting thread		M30×2; G1 1/4; NPT3/4			
Communication method		Modbus /RS485			
Work Voltage		12VDC -18VDC			
Com transmission rate		9600/4800/1200(The default 9600 cannot be changed), None			

DMTI GS Specification





For further information, please contact:

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Website: <http://mam-corporation.com>