



# Multis "m" Series

The versatile new range of single & multifunction energy meters




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COMPACT  
USER FRIENDLY  
ADVANCED FUNCTIONS

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Compact and user friendly, the Multis "m" is a versatile range adapted for monitoring and managing electrical energy. Its communication function enables the use of data collected via a PLC or monitoring system. The Multis "m" is a key tool in any energy efficiency project.

# ⇒ Summary

- Overview ..... p. 3
- Synopsis of key features ..... p. 4 & 5
- Single function meters (Ammeter / Voltmeter) ..... p. 6 & 7  
(Im15, Im35 / Vm15, Vm35)
- VAF meter (Voltage, Current Frequency) ..... p. 8  
(Lm25)
- Multifunction meter ..... p. 9  
(Lm46)
- Multifunction meter with THD ..... p. 10 & 11  
(Lm55 & Lm56)

# Multis "m" Series

DIGITAL METER

A complete range of single and three phase Digital Meters



Compact Range for application where power quality and availability is a key issue

## ➤ User friendly

- Simple to use and to configure with only one scroll down menu.

## ➤ Easy to read

- Values displayed by a Red LED technology.
- High efficient reading in dark environment or glazed doors.

## ➤ Socomec design

- Innovative design in the same line as the DIRIS A range.
- It give a high quality impact on the panels.

## ➤ Complete product line

- Socomec offers a wide range of single and three phase Digital Meters for HV-LV network.

## ➤ Positive Security

- Password Protected

## ➤ Versatile range

- 1A / 5A secondary current.
- HV-LV network.
- 50Hz-60Hz frequency.



# Multis "m" Series

## Ammeter



Im15

Im15

Im35

Im35

### MEASUREMENTS

I	•	•	•	•
U	-	-	-	-
F	-	-	-	-
V	-	-	-	-
P, Q, S, Ea, ER, Cos	-	-	-	-
Hour run	-	-	-	-
Import/Export (Active Energy & Reactive Energy)	-	-	-	-
THD (V & I)	-	-	-	-
AC network	LV single phase	LV single phase	LV single phase	LV single phase
Measurement range	10.....150% of rated value	10.....150% of rated value	10.....150% of rated value	10.....150% of rated value
Measurement range between phases	-	-	-	-
Accuracy	1%	1%	1%	1%
CT Secondary programable	with 1A Secondary	with 5A Secondary	with 1A Secondary	with 5A Secondary
PT Programable	-	-	-	-
MAX Demand	-	-	-	-

### COMMUNICATION

Type	-	-	-	-
PULSE OUTPUT	-	-	-	-
INPUT	-	-	-	-

### AUXILIARY POWER SUPPLY

Self supplied Voltage	no 40...300 VAC/DC (+/-5%)	no 40...300 VAC/DC (+/-5%)	no 40...300 VAC/DC (+/-5%)	no 40...300 VAC/DC (+/-5%)
Frequency	45...65Hz	45...65Hz	45...65Hz	45...65Hz
Consumption	< 3VA	< 3VA	< 3VA	< 3VA

### CASE

Type	panel mounting	panel mounting	panel mounting	panel mounting
Dimensions (H x W x D)	96 mm x 96 mm x 27 mm	96 mm x 96 mm x 27 mm	96 mm x 96 mm x 27 mm	96 mm x 96 mm x 27 mm
Panel cut out dimensions (H x W)	92 +0.8 mm x 92 + 0.8 mm	92 +0.8 mm x 92 + 0.8 mm	92 +0.8 mm x 92 + 0.8 mm	92 +0.8 mm x 92 + 0.8 mm
Weight (Without Packing Box)	0.31kg	0.31kg	0.31kg	0.31kg
Front protection rating	IP50	IP50	IP50	IP50

### OPERATING CONDITIONS

Operating temperature	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C
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### REFERENCE No.

MULTIS	192J9025	192J9024	192J9027	192J9026
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Volmeter		Multi-meter			
					
Vm15	Vm35	Lm25	Lm46	Lm55	Lm56

-	-	•	•	•	•
•	•	•	•	•	•
-	-	•	•	•	•
-	•	•	•	•	•
-	-	-	-	-	-
-	-	•	•	•	•
-	-	-	•	•	•
-	-	-	•	•	•
-	-	-	-	•	•
LV Three phase	LV Three phase	LV Three phase	LV Three phase + neutral	LV or HV Three phase + neutral	LV or HV Three phase + neutral
10.....120% of rated value	10.....120% of rated value	10.....120% of rated value	10.....120% of rated value	5.....120% of rated value	5.....120% of rated value
1%	1%	1%	1%	110--440VAC	110--440VAC
		1A or 5A	1A or 5A	1A or 5A	1A or 5A
		•	•	•	•
			•	•	•

-	-	-	MODBUS RS485	MODBUS RS485	MODBUS RS485
-	-	-	•	•	•
-	-	-	-	-	-

no 40...300 VAC/DC (+/-5%)	no 40...300 VAC/DC (+/-5%)	no 40...300 VAC/DC (+/-5%)	no 40...300 VAC/DC (+/-5%)	no 100...250 VAC/DC+/-10%	no 100...250 VAC/DC+/-10%
45...65Hz	45...65Hz	45...65Hz	45...65Hz	45...65Hz	45...65Hz
< 3VA	< 3VA	< 3VA	< 4VA	< 4VA	< 4VA

panel mounting	panel mounting	panel mounting	panel mounting	panel mounting	panel mounting
96 mm x 96 mm x 27 mm	96 mm x 96 mm x 27 mm	96 mm x 96 mm x 55 mm	96 mm x 96 mm x 55 mm	96 mm x 96 mm x 80 mm	96 mm x 96 mm x 80 mm
92 +0.8 mm x 92 + 0.8 mm	92 +0.8 mm x 92 + 0.8 mm	92 +0.8 mm x 92 + 0.8 mm	92 +0.8 mm x 92 + 0.8 mm	92 +0.8 mm x 92 + 0.8 mm	92 +0.8 mm x 92 + 0.8 mm
0.31kg	0.31kg	0.32kg	0.32kg	0.70kg	0.70kg
IP50	IP50	IP50	IP50	IP54	IP54

0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C	-10.....+55°C	-10.....+55°C
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192J9014	192J9015	192J9101	192J9112	192J9200	192J9201
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# MULTIS *Im15 / Im35 / Vm15 / Vm35*



## 96 x 96 - 1 or 3 Phase - Current, Voltage measurement

### ➤ Function

The single and three phase Socomec Multis m range, 96 x 96 mm ensures an accurate measurement of electrical parameters I and V.

### ➤ Application

The MULTIS Im15 is a single phase digital ammeter for AC network.

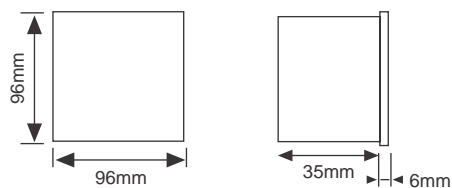
The MULTIS Im35 is a 3 phase digital ammeter for AC network.

The MULTIS Vm15 is a single phase digital voltmeter for AC network.

The MULTIS Vm35 is a 3 phase digital ammeter for AC network.

## Ammeter MULTIS Im15 / Im35

### ➤ Dimensions



Type	Panel Mounting
Dimensions W x H x D	96 x 96 x 40 mm
Panel Cut Out Dimensions (h X W)	92+0.8mm x 92+0.8 mm
Front Protection Rating	IP50
Weight	0.31 kg

### ➤ Electrical characteristics

#### Measurements

AC Network	LV single + Three phase
Current Range	10...120% of rated value
Frequency	45...65Hz
Accuracy	1%
Nominal Input Current Range	1A or 5A AC RMS (to be Specified while order)

#### Auxiliary power supply

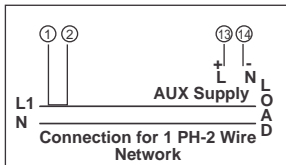
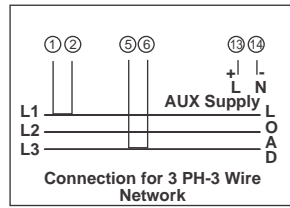
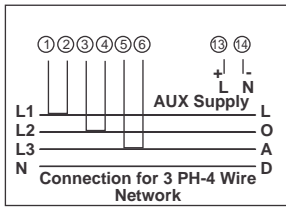
AUX Supply	40 - 300 V AC-DC (+5%)
Frequency	45 to 65 Hz
VA Burden	3 VA

#### Operating conditions

Operating Temperature	0 to +50 °C
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# Ammeter MULTIS Im15 / Im35

## Connection



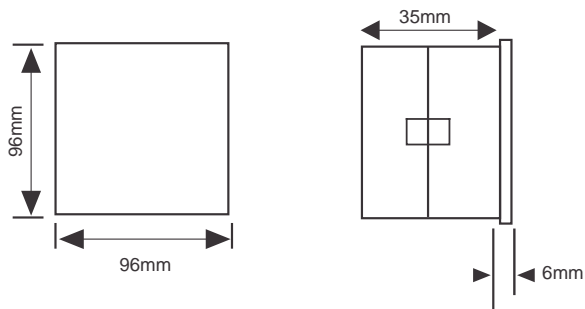
## References



Auxiliary supply	Frequency	MULTIS Im15 Reference	MULTIS Im35 Reference
40 ... 300 VAC/DC	45...60 Hz	CT 1A 192J9025 CT 5A 192J9024	CT 1A 192J9027 CT 5A 192J9026

# Voltmeter MULTIS Vm15 / Vm35

## Dimensions



Type	Panel Mounting
Dimensions W x H x D	96 x 96 x 40 mm
Panel Cut Out Dimensions (h X W)	92+0.8mm x 92+0.8mm
Front Protection Rating	IP50
Weight	0.31 kg

## Electrical characteristics

Measurements	
AC Network	Lv Single + Three Phase
Measurement Range	57... 600 VAC
Accuracy	± 1%
Voltage Overload	2x Rated Value For 1s, Repeated 10 Times At 10s Interval

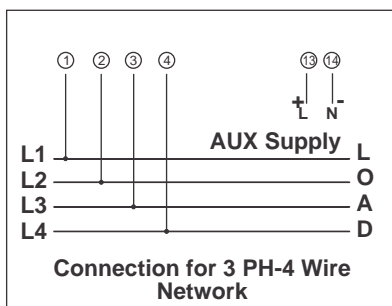
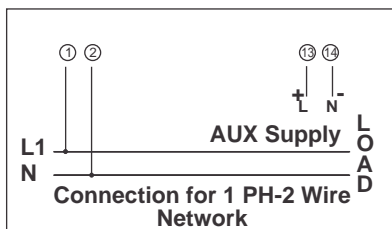
## Auxiliary power supply

Voltage	40 - 300 VAC - DC (+5%)
Frequency	45 to 65 Hz
Va Burden	3 VA approx

## Operating conditions

Operating Temperature	0 to 50 °C
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## Connection



## References



Auxiliary supply	Frequency	MULTIS Vm15 Reference	MULTIS Vm35 Reference
40 ... 300 VAC	45 - 65 Hz	192J9014	192J9015

# MULTIS Lm25

NEW



## 96 x 96 - Three Phase VAF Meter

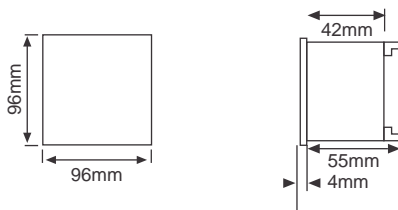
### Application

MULTIS Lm25 is a digital LV and HV three phase measurement device. It displays three phase voltage / current / frequency.

### Function

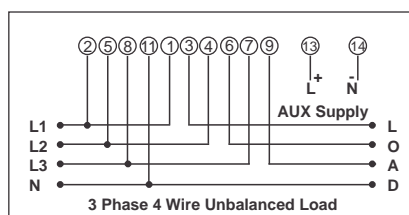
The three phase Socomec Multis m range, 96 x 96 mm ensures an accurate measurement of electrical parameters I, V and Hz.

### Dimensions



Type	Panel Mounting
Dimensions W x H x D	96 x 96 x 46 mm
Panel Cut Out Dimensions (H x W)	92+0.8mm x 92+0.8 mm
Front Protection Rating	IP 50
Weight	0.32 kg

### Connection



### Electrical characteristics

#### Auxiliary power supply

AUX Supply	40V - 300 VAC-DC ( $\pm 5\%$ )
Frequency	45 to 65 Hz
VA Burden	3 VA

#### Operating conditions

Operating Temperature	0 to 50 °C
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### Measurements

#### Current measurements

Nominal Input Current	5A AC
System CT Secondary	1A & 5A
System CT Primary	From 1A upto 9999A
Max. Continuous input Current	120% of rated value
Accuracy	$\pm 1.0\%$

#### Voltage measurements

Nominal Input Voltage	PN-290V, PP-500V
System PT Secondary	100V LL to 500V LL
System PT Primary	100V LL to 692K LL
Max. Continuous Input Voltage	120% of rated value
Accuracy	$\pm 1.0\%$

#### Frequency measurement

Frequency Range	45...65 Hz
Accuracy	$\pm 0.5\%$

### References



Auxiliary supply	Frequency	MULTIS Lm25 Reference
40 ... 300 VAC	45 - 65 Hz	192J9101



# MULTIS Lm46

NEW



## 96 x 96 - Three Phase - All Electrical Parameters

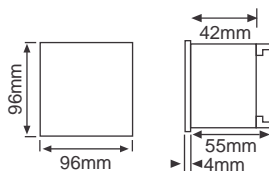
### Application

MULTIS Lm46 is a digital three phase multifunction meter for measuring electrical value like voltage, current, energy with on site programmable functions of CT / PT, RS485 modbus Communication.

### Function

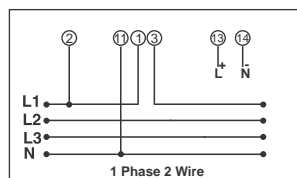
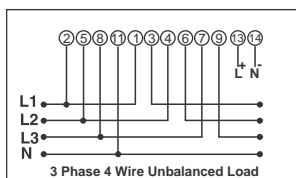
The Socomec Multis m range, 96 x 96 mm ensures an accurate measurement of all electrical parameters I, V and Hz, P, Q, S, E.

### Dimensions



Type	Panel Mounting
Dimensions W x H x D	96 x 96 x 46 mm
Front IP	IP 50
Rear	IP 20
Weight	0.32 kg

### Connection



### Electrical characteristics

#### Auxiliary supply

Voltage	40V - 300 V AC - DC (± 5%)
Frequency	45 to 65 Hz
Consumption	<4 VA Approx

#### Operating temperature / conditions

Operating Temp.	0 to + 50 °C
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#### Measurements

##### Current measurements

System CT Secondary	1A & 5A
System CT Primary	From 1A upto 9999A
Max. Continuous Input Current	120% of rated value
Accuracy	± 1.0%

##### Voltage measurements

Nominal Input Voltage	PN-290V , PP-500V
System PT Secondary	100V LL to 500V LL
System PT Primary	100V LL to 692K LL
Max. Continuous input Voltage	120% of rated value
Accuracy	± 1.0%

##### Frequency measurement

Frequency Range	45...65 Hz
Accuracy	± 0.5%

##### Energy accuracy

Active Energy	± 1.0%
Reactive Energy	± 1.0%

### References

Auxiliary supply	Frequency	MULTIS Lm46 Reference
40 ... 300 VAC	45 - 65 Hz	192J9112



# MULTIS *Lm55 / Lm56*



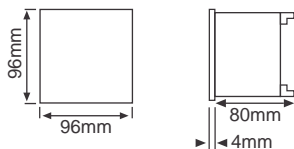
## Function

The Socomec MULTIS range is a three phase multifunction measurement device. It measures three phase voltages, current, power, frequency, PF, THD with max demand and Import / Export feature. In addition it also has Rs485 communication port

## Application

MULTIS Lm55 & Lm 56 are digital LV and HV three phase measurement device. They display the most important electrical values needed in an energy efficiency process.

## Dimensions



## Operating temperature / conditions

Mounting	Panel Mounting
Dimensions Lx W x H	96 x 96 x 80 mm
Front IP	IP 54
Rear	IP 20
Weight	0.620 kg

## Electrical characteristics

### Lm55

#### Auxiliary supply

Voltage	100V - 250V AC - DC ( $\pm 10\%$ )
Frequency	45 to 66 Hz
Consumption	<4 VA Approx

#### Operating temperature / conditions

Operating Temp.	0 to +50° C
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#### Measurements

##### Current measurements

System CT Secondary	1A & 5A
System CT Primary	From 1A upto 9999A
Max. Continuous Input Current	120% of rated value
Accuracy	$\pm 0.5\%$

##### Voltage measurements

Nominal Input Voltage	PN-290V , PP-500V
System PT Secondary	100V LL to 500V LL
System PT Primary	100V LL to 692K LL
Max. Continuous Input Voltage	120% of rated value
Accuracy	$\pm 0.5\%$

##### Frequency measurement

Frequency Range	40...70 Hz
Accuracy	$\pm 0.2\%$

##### Measurement Accuracy

Active Energy	$\pm 1.0\%$
Reactive Energy	$\pm 1.0\%$
Apparent Energy	$\pm 1.0\%$
Active / Reactive / Apparent Power	$\pm 0.5\%$
Total Harmonic Distortion	$\pm 1.0\%$

### Lm56

#### Auxiliary supply

Voltage	100V - 250V AC - DC ( $\pm 10\%$ )
Frequency	45 to 66 Hz
Consumption	<4 VA Approx

#### Operating temperature / conditions

Operating Temp.	0 to +50° C
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#### Measurements

##### Current measurements

System CT Secondary	1A & 5A
System CT Primary	From 1A upto 9999A
Max. Continuous Input Current	120% of rated value
Accuracy	$\pm 0.5\%$

##### Voltage measurements

Nominal Input Voltage	PN-290V , PP-500V
System PT Secondary	100V LL to 500V LL
System PT Primary	100V LL to 692K LL
Max. Continuous Input Voltage	120% of rated value
Accuracy	$\pm 0.5\%$

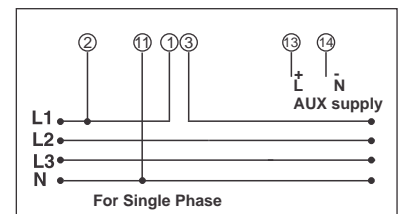
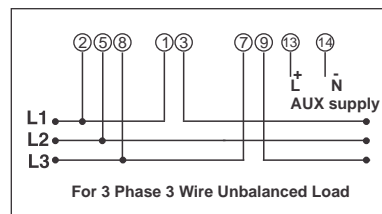
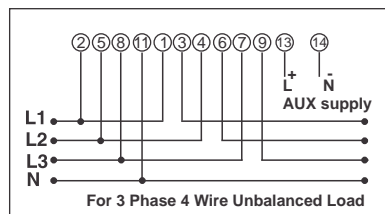
##### Frequency measurement

Frequency Range	40...70 Hz
Accuracy	$\pm 0.2\%$

##### Measurement Accuracy

Active Energy	$\pm 0.5\%$
Reactive Energy	$\pm 0.5\%$
Apparent Energy	$\pm 0.5\%$
Active / Reactive / Apparent Power	$\pm 0.5\%$
Total Harmonic Distortion	$\pm 1.0\%$

## Connection



## References



Auxiliary supply	Frequency	MULTIS Lm55 Reference	MULTIS Lm56 Reference
40 ... 300 VAC	45 - 65 Hz	192J9200	192J9201

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### USA, CANADA & MEXICO

## OTHER COUNTRIES

[www.socomec.com/worldwide](http://www.socomec.com/worldwide)

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