

Macsun Solar Microinverter



Microinverter System



Model MS-MSI250

Input data(DC)

Recommended input power (W) 200~310

MPPT voltage range (V) 27~48

Operating voltage range (V) 16~60

Maximum input voltage (V) 60

Maximum input current (A) 10.5

Output Data (AC)

Rated output power (W) 250

Rated output current (A) 1.09@230V a.c, 1.04@240V a.c, 1.20@208V a.c,

Nominal output voltage/range (V) 230/180-275 1, 240/211-264 1, 208/183-250 1

Nominal frequency/range (Hz) 50/45-55 1, 60/59.3-60.5 1

Power factor >0.99

Output current harmonic distortion <3%

Maximum Units per 20A Branch 14@230V a.c or 240V a.c, 13@208V a.c

Efficiency

Peak inverter efficiency 96.7%

CEC weighted efficiency 96.5%

Nominal MPPT efficiency 99.8%

Night time power consumption (mW) <50

Environmental & Mechanical Data

Ambient temperature range (°C) -40 ~ +65

Operating temperature range (°C) -40 ~ +85

Dimensions (W×H×D mm) 178×153×28

Weight (kg) 1.98

Enclosure rating IP67

Cooling Natural convection – No fans

Features

Communication Wireless

Design Life >25 Years

1 Volatage and frequency ranges can be extended beyond nominal if required by the utility

Model MS-MSI300

Input data(DC)

Recommended input power (W) 200~380

MPPT voltage range (V) 32~48

Operating voltage range (V) 16~60

Maximum input voltage (V) 60

Maximum input current (A) 10.5

Output Data (AC)

Rated output power (W) 300

Rated output current (A) 1.30@230V a.c, 1.25@240V a.c, 1.44@208V a.c,
Nominal output voltage/range (V) 230/180-275 1, 240/211-264 1, 208/183-250 1
Nominal frequency/range (Hz) 50/45-55 1, 60/59.3-60.5 1
Power factor >0.99
Output current harmonic distortion <3%
Maximum Units per 20A Branch 12@230V a.c or 240V a.c, 11@208V a.c

Efficiency

Peak inverter efficiency 96.7%
CEC weighted efficiency 96.5%
Nominal MPPT efficiency 99.8%
Night time power consumption (mW) <50

Environmental & Mechanical Data

Ambient temperature range (°C) -40 ~ +65
Operating temperature range (°C) -40 ~ +85
Dimensions (W×H×D mm) 178×153×28
Weight (kg) 1.98
Enclosure rating IP67
Cooling Natural convection – No fans

Features

Communication Wireless
Design Life >25 Years
1 Volatage and frequency ranges can be extended beyond nominal if required by the utility

Model MS-MS1500

Input data(DC)

Recommended input power (W) 200~310,200~310
MPPT voltage range (V) 27~48, 27~48
Operating voltage range (V) 16~60 , 16~60
Maximum input voltage (V) 60 , 60
Maximum input current (A) 10.5, 10.5

Output Data (AC)

Rated output power (W) 500
Rated output current (A) 2.17@230V a.c, 2.08@240V a.c, 2.40@208V a.c,
Nominal output voltage/range (V) 230/180-275 1, 240/211-264 1, 208/183-250 1
Nominal frequency/range (Hz) 50/45-55 1, 60/59.3-60.5 1

Power factor >0.99

Output current harmonic distortion <3%

Maximum Units per 20A Branch 7@230V a.c or 240V a.c, 6@208V a.c

Efficiency

Peak inverter efficiency 96.7%

CEC weighted efficiency 96.5%

Nominal MPPT efficiency 99.8%

Night time power consumption (mW) <50

Environmental & Mechanical Data

Ambient temperature range (°C) -40 ~ +65

Operating temperature range (°C) -40 ~ +85

Dimensions (W×H×D mm) 250×170×28

Weight (kg) 3.0

Enclosure rating IP67

Cooling Natural convection – No fans

Features

Communication Wireless

Design Life >25 Years

1 Volatage and frequency ranges can be extended beyond nominal if required by the utility

Model MS-MSI600

Input data(DC)

Recommended input power (W) 200~380 , 200~380

MPPT voltage range (V) 29~48 , 29~48

Operating voltage range (V) 16~60 , 16~60

Maximum input voltage (V) 60 , 60

Maximum input current (A) 11.5, 11.5

Output Data (AC)

Rated output power (W) 600

Rated output current (A) 2.61@230V a.c, 2.50@240V a.c, 2.88@208V a.c,

Nominal output voltage/range (V) 230/180-275 1, 240/211-264 1, 208/183-250 1

Nominal frequency/range (Hz) 50/45-55 1, 60/59.3-60.5 1

Power factor >0.99

Output current harmonic distortion <3%

Maximum Units per 20A Branch 6@230V a.c or 240V a.c, 5@208V a.c

Efficiency

Peak inverter efficiency 96.7%

CEC weighted efficiency 96.5%

Nominal MPPT efficiency 99.8%

Night time power consumption (mW) <50

Environmental & Mechanical Data

Ambient temperature range (°C) -40 ~ +65

Operating temperature range (°C) -40 ~ +85

Dimensions (W×H×D mm) 250×170×28

Weight (kg) 3.0

Enclosure rating IP67

Cooling Natural convection – No fans

Features

Communication Wireless

Design Life >25 Years

1 Voltage and frequency ranges can be extended beyond nominal if required by the utility

Model MS-MSI700

Input data(DC)

Recommended input power (W) 250~400 , 250~400

MPPT voltage range (V) 33~48 , 33~48

Operating voltage range (V) 16~60 , 16~60

Maximum input voltage (V) 60 , 60

Maximum input current (A) 11.5, 11.5

Output Data (AC)

Rated output power (W) 700

Rated output current (A) 3.04@230V a.c, 2.91@240V a.c, 3.36@208V a.c

Nominal output voltage/range (V) 230/180-275 1, 240/211-264 1, 208/183-250

Nominal frequency/range (Hz) 50/45-55 1, 60/59.3-60.5 1

Power factor >0.99

Output current harmonic distortion <3%

Maximum Units per 20A Branch 5@230V a.c or 240V a.c, 4@208V a.c

Efficiency

Peak inverter efficiency 96.7%

CEC weighted efficiency 96.5%
Nominal MPPT efficiency 99.8%
Night time power consumption (mW) <50

Environmental & Mechanical Data

Ambient temperature range (°C) -40 ~ +65
Operating temperature range (°C) -40 ~ +85
Dimensions (W×H×D mm) 250×170×28
Weight (kg) 3.0
Enclosure rating IP67
Cooling Natural convection – No fans

Features

Communication Wireless
Design Life >25 Years
1 Voltage and frequency ranges can be extended beyond nominal if required by the utility

Model MS-MSI1000

Input data(DC)

Recommended input power (W) 200~310
MPPT voltage range (V) 27~48
Operating voltage range (V) 16~60
Maximum input voltage (V) 60
Maximum input current (A) 10.5

Output Data (AC)

Rated output power (W) 1000
Rated output current (A) 4.35@230V a.c, 4.16@240V a.c, 4.81@208V a.c
Nominal output voltage/range (V) 230/180-275 1, 240/211-264 1, 208/183-250
Nominal frequency/range (Hz) 50/45-55 1, 60/59.3-60.5 1
Power factor >0.99
Output current harmonic distortion <3%
Maximum Units per 20A Branch 4@230V a.c or 240V a.c, 3@208V a.c

Efficiency

Peak inverter efficiency 96.34%
CEC weighted efficiency 96.0%
Nominal MPPT efficiency 99.8%
Night time power consumption (mW) <50

Environmental & Mechanical Data

Ambient temperature range (°C) -40 ~ +65
Operating temperature range (°C) -40 ~ +85
Dimensions (W×H×D mm) 280 176 33
Weight (kg) 3.75
Enclosure rating IP67
Cooling Natural convection – No fans

Features

Communication Wireless
Design Life >25 Years
1 Volatage and frequency ranges can be extended beyond nominal if required by the utility

Model MS-MSI1200

Input data(DC)

Recommended input power (W) 200~380
MPPT voltage range (V) 32~48
Operating voltage range (V) 16~60
Maximum input voltage (V) 60
Maximum input current (A) 10.5

Output Data (AC)

Rated output power (W) 1200
Rated output current (A) 5.22@230V a.c, 5@240V a.c, 5.76@208V a.c
Nominal output voltage/range (V) 230/180-275 1, 240/211-264 1, 208/183-250
Nominal frequency/range (Hz) 50/45-55 1, 60/59.3-60.5 1
Power factor >0.99
Output current harmonic distortion <3%
Maximum Units per 20A Branch 3@230V a.c or 240V a.c, 3@208V a.c

Efficiency

Peak inverter efficiency 96.34%
CEC weighted efficiency 96.0%
Nominal MPPT efficiency 99.8%
Night time power consumption (mW) <50

Environmental & Mechanical Data

Ambient temperature range (°C) -40 ~ +65

Operating temperature range (°C) -40 ~ +85

Dimensions (W×H×D mm) 280x176x33

Weight (kg) 3.75

Enclosure rating IP67

Cooling Natural convection – No fans

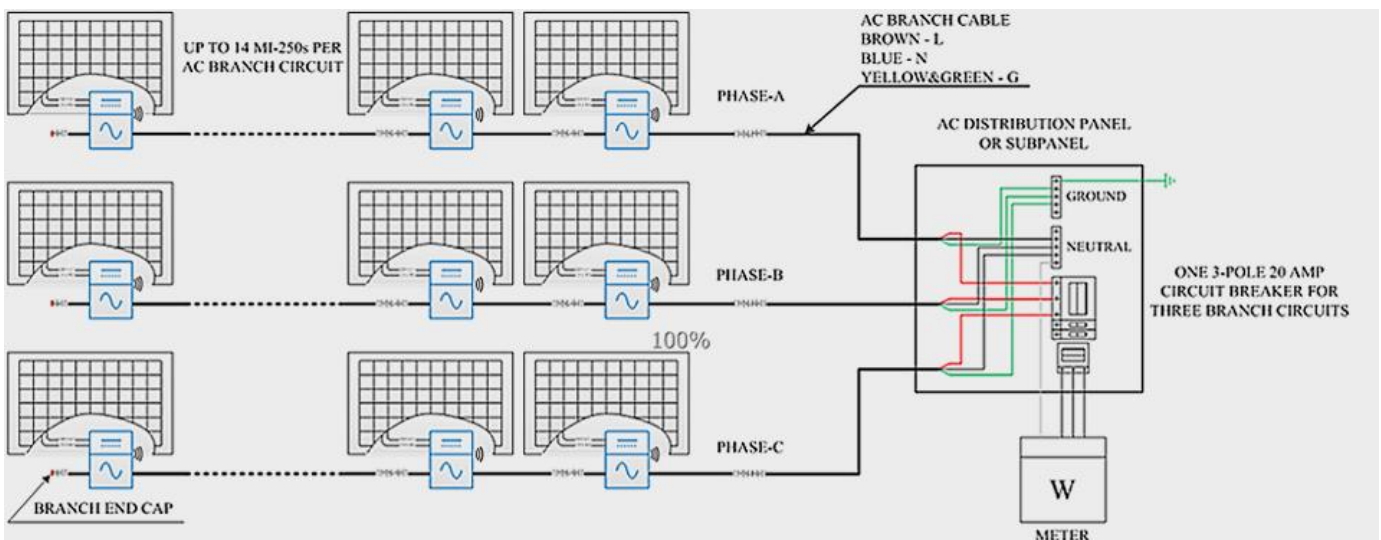
Features

Communication Wireless

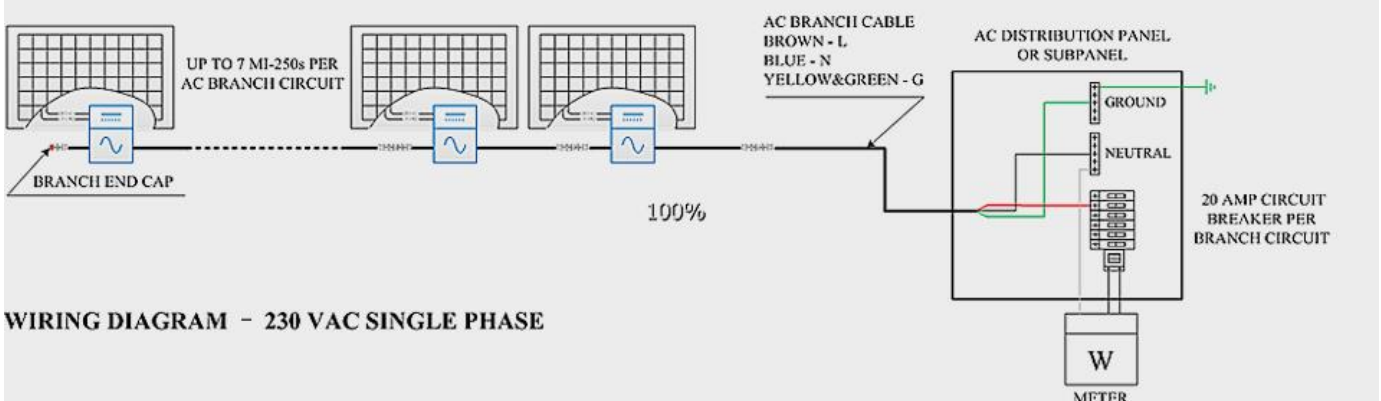
Design Life >25 Years

1 Voltage and frequency ranges can be extended beyond nominal if required by the utility

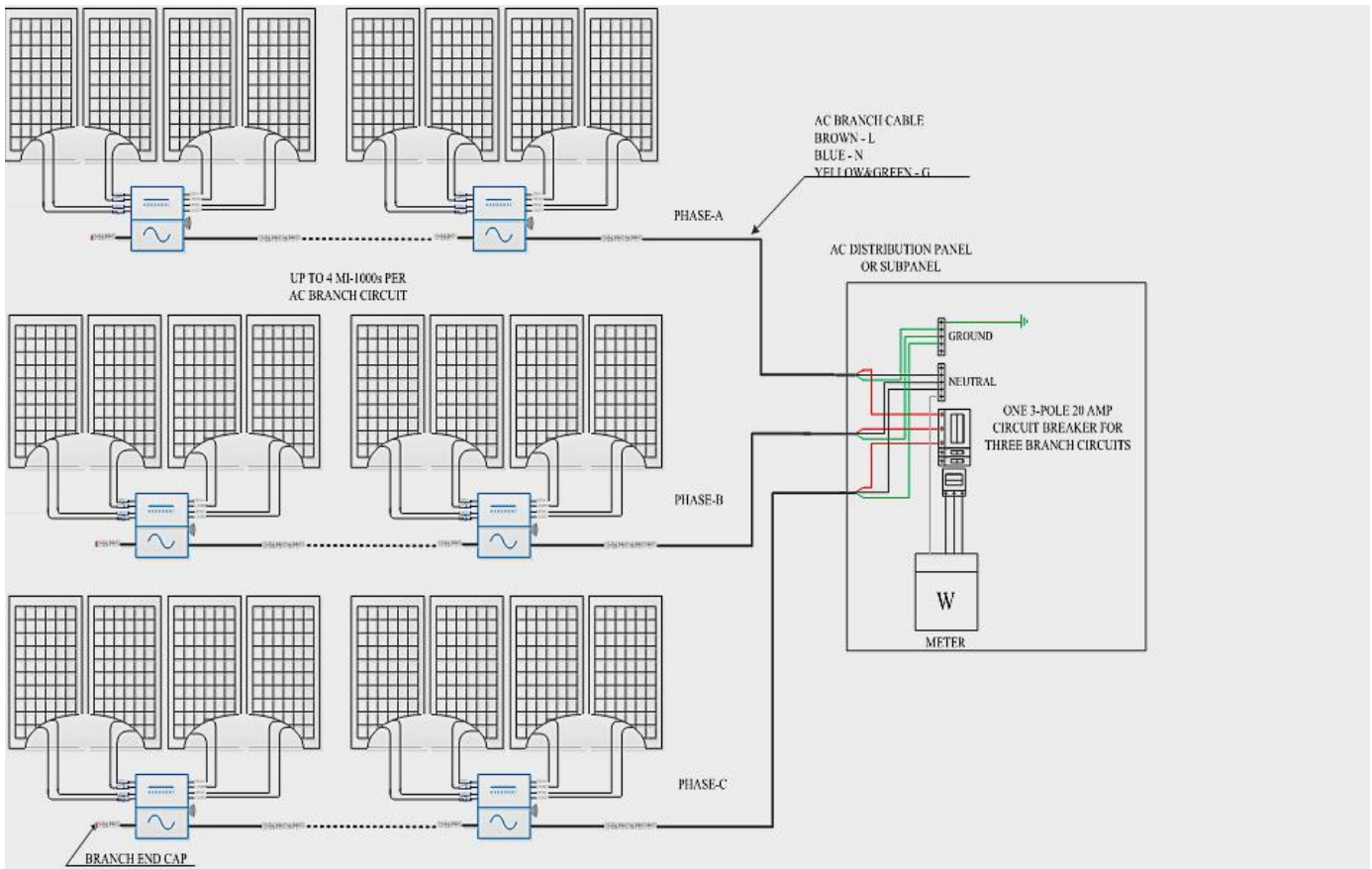
Wiring diagrams for 4 in 1 microinverter



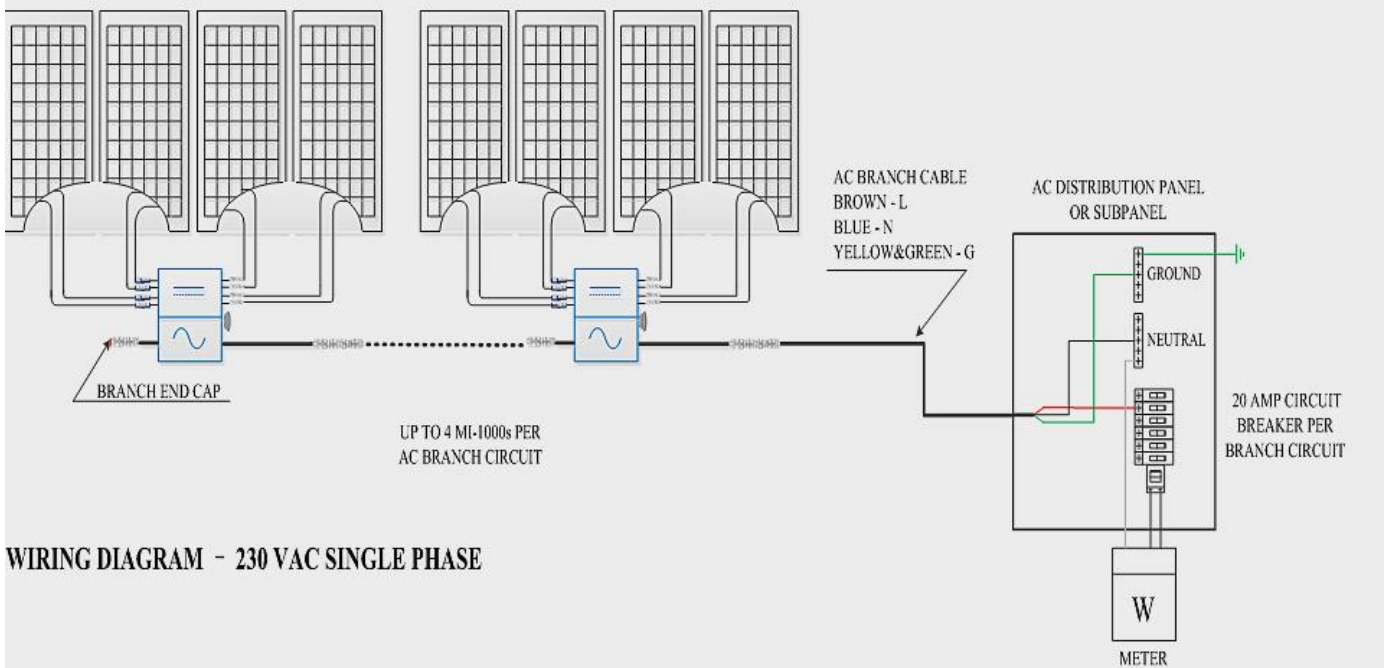
WIRING DIAGRAM - 230 VAC / 400 VAC THREE PHASE



WIRING DIAGRAM - 230 VAC SINGLE PHASE



WIRING DIAGRAM - 230 VAC / 400 VAC THREE PHASE



WIRING DIAGRAM - 230 VAC SINGLE PHASE

Microinverter Accessories

Macsun Solar offers a range of accessories such as DC Extension and AC end cable, connectors etc. to make your job easier and simpler.



Projects



Hangzhou East Software Park Commercial Solar System 1.5kW



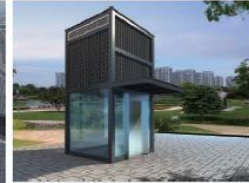
Zhejiang University Commercial Solar System 70kW



Hangkai Group Industrial Solar Systems 200kW



Quzhou Qujiang District Niell Town 500 Residential Solar Systems 500 x 3kW



Ningbo Subway Line 2 Commercial Solar System 20kW



Australia Residential Solar System 3kW



Shanghai Kangshun Industrial Solar Systems 1.2MW



Sri Lanka Residential Solar System 5kW



Hangzhou Xie' an Zijun Commercial Solar System 22kW



Hangzhou Energy Institute Commercial Solar System 10kW



Quzhou Shiliang Residential Solar System 5kW



Hangzhou Hejiayuan Residential Solar System 6kW



Quzhou Wecheng District 63 Residential Solar Systems 343kW



Quzhou Villa Residential Solar System 2kW