

# MMP and MP PANEL SYSTEMS

INCLUSIVE, EASY-TO-INSTALL BALANCE OF SYSTEM PANELS  
FOR BATTERY BACKUP AND OFF-GRID



POWER FOR WORK.  
POWER FOR LIFE.

# ENERGY INDEPENDENCE AND PEACE-OF-MIND COMES IN MANY SHAPES

No matter the size of the home, from tiny home to suburban ranch to coastal dream home, the modular design of Magnum Energy Panel Systems from Sensata meets energy needs. Quickly learn one system and install in multiple configurations for any application.

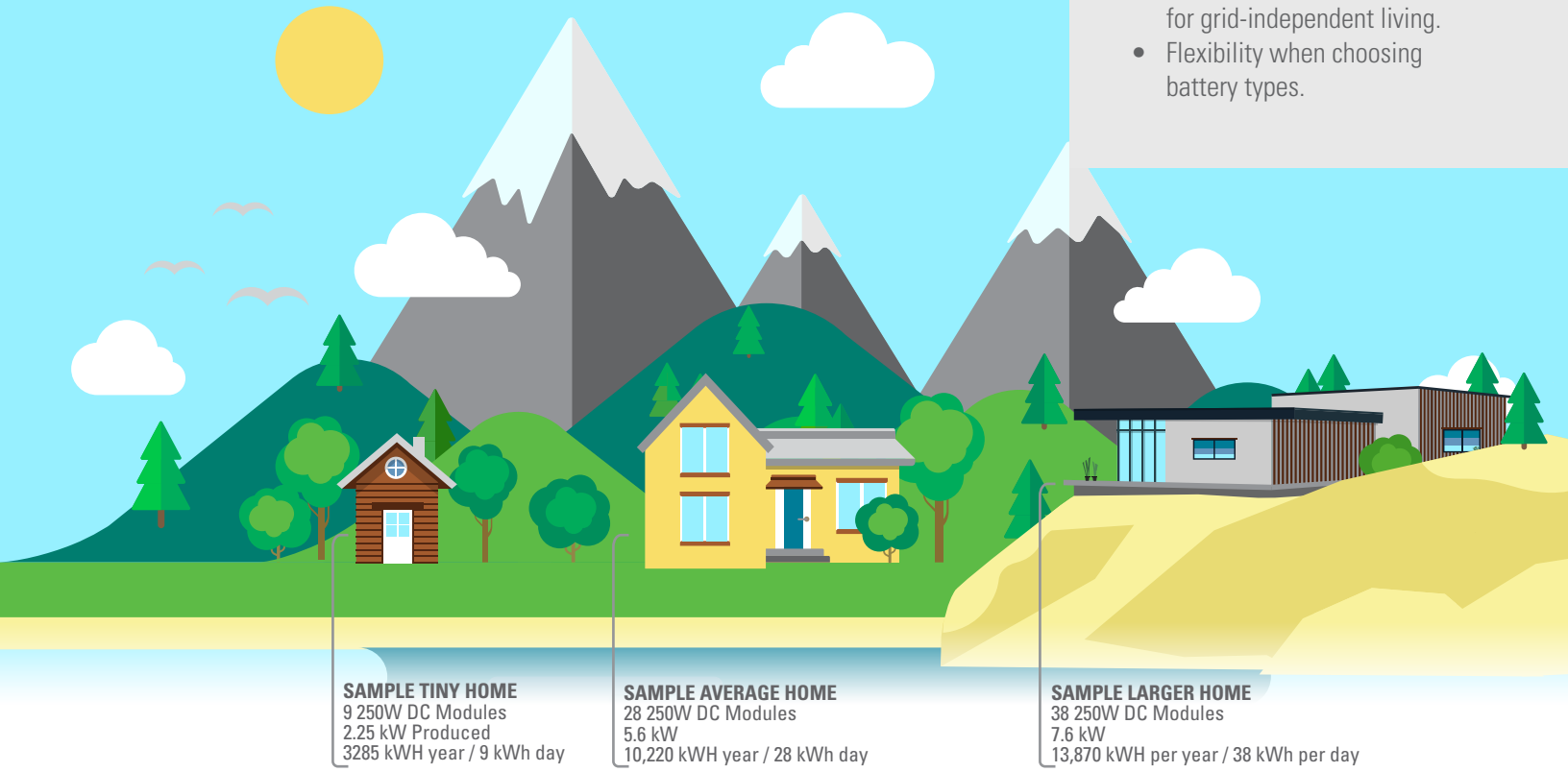
MMP and MP Panels were designed to be easily assembled and programmed on site, saving time and labor costs. Simply hang the backplates, add the MP enclosure with disconnects and add the inverter and charge controller. Then connect the DC – solar and battery bank, and if needed, bring in AC power from a generator or utility. Connect to the AC panel and you're done.\*

## BACKUP POWER SOLUTIONS

- Backup power for areas that lose power frequently.
- Backup power for critical systems that can't lose power.
- Battery storage for areas that are moving to time-of-use rates.

## OFF-GRID SOLUTIONS

- Design independence allowing for custom configurations.
- Reliable solutions purpose built for grid-independent living.
- Flexibility when choosing battery types.



MMP and MP Panel Systems, using the MS-PAE inverter/charger, work to power small and large homes.



**MMP Panel**  
For one inverter only



**MPSL Panel**  
For 1-2 inverter systems



**MPDH Panel**  
For 2-4 inverter systems

4.4 kW Output Power



17.6 kW Output Power

\* Always follow all instructions in the owner's manual.

# MMP PANEL



Pre-wired for fast installation, the MMP Panel accommodates 2000 - 4400 watt output in a convenient, easy-to-hang panel.

The MMP Panel is an inclusive, easy-to-install panel designed to work with one MS-PAE, MS, RD Series inverter/charger. The MMP Panel can be configured to work with any 24 or 48 volt battery-based inverter/charger.

Compact design saves space and presents a coordinated design when hung in plain view.

Not only is the MMP less expensive than purchasing all of the pieces separately, but it is pre-wired for fast installation, saving labor costs.

Breakers are front-mounted for easier access. And, if the ME-ARC remote is used, it is also easily accessible.

The MMP Panel can be wired for 120 VAC or 120/240 VAC output.

The MMP Panel is ETL listed to UL1741 and CSA C22.2 107-01.

The panel fits either din rail or back-mount DC load breakers.

<b>Model Numbers</b>	MMP250-30D MMP250-60S MMP175-30D MMP175-60S
<b>Number of inverters</b>	One inverter
<b>Frequency</b>	60 Hz
<b>Output Voltage in VAC</b>	120
<b>Warranty in Years</b>	5

## Works With

MS-PAE Series
MS Series
RD Series
PT-100 Charge Controller
ME-ARC Remote

## Available Accessories

Backplate
DC Backmount Breaker
DC High Capacity Breakers
Knockout Plate for top of MMP Panel
Charge Controller Bracket

## WHAT IS INCLUDED STANDARD WITH EACH MODEL

	MMP250-30D	MMP250-60S	MMP175-30D	MMP175-60S
AC System Bypass	One 30 amp	One 60 amp	One 30 amp	One 60 amp
AC Input Breaker	One 30 amp dual pole	One 60 amp single pole	One 30 amp dual pole	One 60 amp single pole
DC Breaker	One 250 amp	One 250 amp	One 175 amp	One 175 amp
DC Shunt	One 500 amp / 50 mv	One 500 amp / 50 mv	One 500 amp / 50 mv	One 500 amp / 50 mv
DC Buss Bars	One each for battery positive and negative	One each for battery positive and negative	One each for battery positive and negative	One each for battery positive and negative
Din Rail Back Mount	One each, will hold up to eight breakers	One each, will hold up to eight breakers	One each, will hold up to eight breakers	One each, will hold up to eight breakers
Inverter Hood	One standard	One standard	One standard	One standard
Panel Chassis	One standard	One standard	One standard	One standard



MMP Panel as shipped

# MPSL PANEL



Expandable from one inverter, the MPSL Panel accommodates 8000 - 8800 watt output in a convenient, easy-to-hang panel.

The MPSL Panel is an inclusive, easy-to-install panel designed to work with one or two MS-PAE, MS, or RD Series inverter/chargers. The MMP Panel can be configured to work with any 24 or 48 volt battery-based inverter/charger.

Expand the MPSL to meet your needs by starting with the enclosure and just one inverter and in the future expand to two inverters with ease, using the MPX.

Not only is the MPSL less expensive than purchasing all of the pieces separately, but it is pre-wired for fast installation, saving labor costs.

Breakers are front-mounted for easier access. And, convenient knockouts on the side of the enclosure are compatible with most charge controllers, including the PT-100 Charge Controller.

The panel fits either din rail or back-mount DC load breakers.

Model Numbers	MPSL175-30D MPSL250-30D
Number of inverters	One or two inverters
Frequency	60 Hz
Output Voltage in VAC	120
Warranty in Years	5

## Works With

MS-PAE Series
MS Series
RD Series
PT-100 Charge Controller
ME-ARTR Router
ME-ARC Remote

## Available Accessories

Backplate
Extension Box
Conduit Box
DC Backmount Breaker
DC High Capacity Breakers
Router Front Cover
Inverter Hood
Charge Controller Bracket

## WHAT IS INCLUDED STANDARD WITH EACH MODEL

	MPSL175-30D	MPSL250-30D
AC System Bypass	One 60 amp	One 60 amp
AC Input Breaker	One 30 amp dual pole	One 30 amp dual pole
DC Breaker	One 175 amp	One 250 amp
DC Shunt	One 500 amp / 50 mv	One 500 amp / 50 mv
Inverter Hood	One standard	One standard
Panel Chassis	One standard	One standard
Router Bracket	One standard	One standard



MPSL Panel as shipped



# MPDH PANEL



Expandable to four inverters, the MPDH Panel accommodates 16kW - 17.6kW output with separate enclosures for AC and DC connections.

The MPDH Panel is an inclusive, easy-to-install panel designed to work with up to four MS-PAE Series inverter/chargers. The MPDH Panel can be configured to work with any 24 or 48 volt battery-based inverter/charger.

Expand the MPDH to meet your needs by starting with the enclosure and just two inverters and in the future expand to four inverters with ease, using the MPX.

The 125 amp bypass breaker and 1000 amp DC shunt safely handle the power capacity from this larger system.

Not only is the MPDH less expensive than purchasing all of the pieces separately, but it is pre-wired for fast installation, saving labor costs.

And the MPDH provides separate AC and DC enclosures for contractors who prefer separate enclosures.

Breakers are front-mounted for easier access. And, convenient knockouts on the side of the enclosure are compatible with most charge controllers, including the PT-100 Charge Controller.

The panel fits either din rail or back-mount DC load breakers.

Model Numbers	MPDH175-30D MPDH250-30D
Number of inverters	Two to four inverters
Frequency	60 Hz
Output Voltage in VAC	120
Warranty in Years	5

## Works With

ME-ARTR Router
ME-ARC Remote
MS-PAE Series
PT-100 Charge Controller

## Available Accessories

Backplate
Charge Controller Bracket
Conduit Box
DC Backmount Breaker
DC High Capacity Breakers
Extension Box
Inverter Hood
Router Front Cover

## WHAT IS INCLUDED STANDARD WITH EACH MODEL

	MPDH175-30D	MPDH250-30D
AC System Bypass	One 125 amp	One 125 amp
AC Input Breaker	Two 30 amp dual pole	Two 30 amp dual pole
DC Breaker	Two 175 amp	Two 250 amp
DC Shunt	One 1000 amp / 100 mv	One 1000 amp / 100 mv
Inverter Hood	Two standard	Two standard
Panel Chassis	Two standard	Two standard
Router Bracket	One standard	One standard
Charge Controller Bracket	One standard	One standard



MPDH Panel as shipped

# PANEL SYSTEM ACCESSORIES AND EXTENSION KITS

## MPX EXTENSION KITS

Extend Panel System capacity with one or two extension kits (depending on Panel System). Kits include a DC and AC breaker, wires, and inverter hood.



Model Number	Description	Works With
MPXS250-30D-L	Extension Kit: Left-side installation, includes: 250 amp DC breaker for 24 VDC models, 30 amp AC breaker, wires, parallel cable, and inverter hood	MPSL Panel System
MPXS175-30D-L	Extension Kit: Left-side installation, includes: 175 amp DC breaker for 48 VDC models, 30 amp AC breaker, wires, parallel cable, and inverter hood	MPSL Panel System
MPXS250-30D-R	Extension Kit: Right-side installation, includes: 250 amp DC breaker for 24 VDC models, 30 amp AC breaker, wires, parallel cable, and inverter hood	MPSL Panel System
MPXS175-30D-R	Extension Kit: Right-side installation, includes: 175 amp DC breaker for 48 VDC models, 30 amp AC breaker, wires, parallel cable, and inverter hood	MPSL Panel System
MPXD250-30D-L	Extension Kit: Left-side installation, includes: 250 amp DC breaker for 24 VDC models, 30 amp AC breaker, wires, parallel cable, and inverter hood	MPDH Panel System
MPXD175-30D-L	Extension Kit: Left-side installation, includes: 175 amp DC breaker for 48 VDC models, 30 amp AC breaker, wires, parallel cable, and inverter hood	MPDH Panel System
MPXD250-30D-R	Extension Kit: Right-side installation, includes: 250 amp DC breaker for 24 VDC models, 30 amp AC breaker, wires, parallel cable, and inverter hood	MPDH Panel System
MPXD175-30D-R	Extension Kit: Right-side installation, includes: 175 amp DC breaker for 48 VDC models, 30 amp AC breaker, wires, parallel cable, and inverter hood	MPDH Panel System

## BACKPLATES

Attach all the pieces of a Panel System to a backplate and then hang it on the wall. Backplates save time and energy when assembling Panel Systems.

Model Number	BP-MMP	BP-S	BP-D
Works With	MMP Panel System	MPXD Extension Box MPXS Extension Box MPSL Panel System	MPDH Panel System MPSL Panel System MPXD Extension Box MPXS Extension Box

## PLATES, BRACKETS, AND BREAKERS



Assorted conduit boxes, covers, plates, and hoods are available to further customize MMP and MP Panel Systems.



Add a charge controller with ease to an MMP or MP Panel System with easy-to-install brackets.



Available AC and DC breakers in front mount, back mount, and DIN rail models.

# ABOUT SENSATA TECHNOLOGIES

The name Sensata comes from the Latin word sensata, meaning “those gifted with sense”. To complement our business and name, our logo is inspired by Braille, the writing system based on touch.

Our highly engineered devices satisfy the world’s growing need for safety, energy efficiency, and a clean environment. These are devices that improve safety, efficiency and comfort for millions of people every day and are used in automotive, appliance, aircraft, industrial, military, heavy vehicle, heating, air conditioning, data, telecommunications, recreational vehicle and marine applications.

Until 2006, we were called Texas Instruments Sensors & Controls. Today we are the world’s leading supplier of sensors and controls across a broad range of markets and applications. From integrated manufacturing to state-of-the-art environmental practices and a full spectrum of technical and analytical services, Sensata Technologies remains committed to helping its customers find leading-edge technology solutions to meet today’s market needs.



## SENSATA POWER CONVERSION AND THE MAGNUM ENERGY BRAND

Sensata’s Power Conversion business unit began as two well-known inverter companies, Dimensions Inverters and Magnum Energy. Dimensions Inverters joined Sensata Technologies in 2007 and Magnum Energy in 2014. Under the Magnum Energy and Dimensions Power brands, Sensata Technologies continues to manufacture exceptional inverters, inverter/chargers, and accessories catering to mobile applications, including utilities, corporate fleets, RV, marine, and trucks; renewable energy applications, and the export market.

Shipped worldwide, our products use the highest quality components to respond to the

extreme conditions of variable climates. Our dedicated staff of engineering, manufacturing, and customer service professionals work closely with customers to design and build some of the industry’s most reliable, advanced, and cost effective inverters, inverter/chargers and accessories.

Offering both sine wave and modified sine wave models ranging from 500 to 17,600 watts and the ability to accommodate input ranges from 12 to 48 VDC, the Magnum Energy product line has the inverter or inverter/charger to meet your needs.



The World Depends on Sensors and Controls

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