

# Magnum Panel Systems

**UL1741 Interconnection System Equipment** 



**The Powerful Difference** 

### **MMP – Mini Magnum Panel**





The MMP Enclosure

The MMP shown with inverter (sold separately) and optional remote and backplate.

The MMP – **M**ini **M**agnum **P**anel is an inclusive, easy-to-install panel designed to work with one Magnum MS-AE, MS-PAE, MS, RD or other non-Magnum inverter/charger.

#### **FEATURES**:

- Small footprint: only 12.5" wide x 18" tall x 8" deep
- Money-saving design: not only is the MMP less expensive, but it is prewired for fast installation, saving labor costs
- Easy access: front-mounted breakers and remote (optional)

#### Choices: can be wired for 120 VAC or 120/240 VAC output

- Inclusive: works with non-Magnum inverter/ chargers (stand-alone parts included)
- Listed: ETL listed to UL1741 and CSA C22.2 107-01
- DC load breakers: fits either din rail or backmount DC load breakers.

#### INCLUDES:

- One DC breaker 175A or 250A
- One AC bypass breaker 30A dual pole or 60A single pole
- One AC input breaker 30A dual pole or 60A single pole
- 500A/50mv DC shunt
- DC buss bars for battery positive and negative
- Din rail or back mount for optional DC mini breakers – will hold up to eight breakers

#### PART NUMBERS

- MMP250-30D
- MMP250-60S
- MMP175-30D
- MMP175-60S

### **MPSL - Magnum Panel**



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The MPSL shown with a single inverter (sold separately).

The MPSL shown with two inverters (sold separately), an MPX extension to accommodate a second inverter, an optional dual backplate, and an optional router.

The MPSL – **M**agnum **P**anel, **S**ingle Enclosure, **L**ow Capacity – is designed to accommodate a maximum of two inverters.

#### FEATURES:

- **Expandable:** start with the enclosure and just one inverter and in the future expand to two inverters with ease, using the MPX.
- Easy installation: all connections are frontmounted, including AC and DC breakers and the MPX.
- **Labor saving:** panel is prewired for fast installation, saving labor costs.
- DC load breakers: fits either din rail or backmount DC load breakers.
- Convenient knockouts: knockouts on the side of the enclosure are compatible with most charge controllers.

#### **INCLUDES:**

- One DC breaker 250A
- One 60A AC bypass breaker
- 500A/50mv DC shunt
- Inverter AC input protection
- MPX extension includes AC/DC circuit protection and wiring

### PART NUMBERS

MPSL-30D

### **MPSH - Magnum Panel**

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The MPSH shown with three inverters (sold separately), two MPX extensions to accommodate the additional inverters, two backplates, and an optional router.

The MPSH – **M**agnum **P**anel, **S**ingle Enclosure, **H**igh Capacity – is designed to accommodate a maximum of three inverters.

#### **FEATURES**:

- More power capacity: the 125A bypass breaker and the 1000A DC shunt safely handle the power from larger systems.
- **Expandable:** start with the enclosure and just one inverter and in the future expand to up to three inverters with ease, using the MPX.
- **Labor saving:** panel is prewired for fast installation, saving labor costs.

#### **PART NUMBERS**

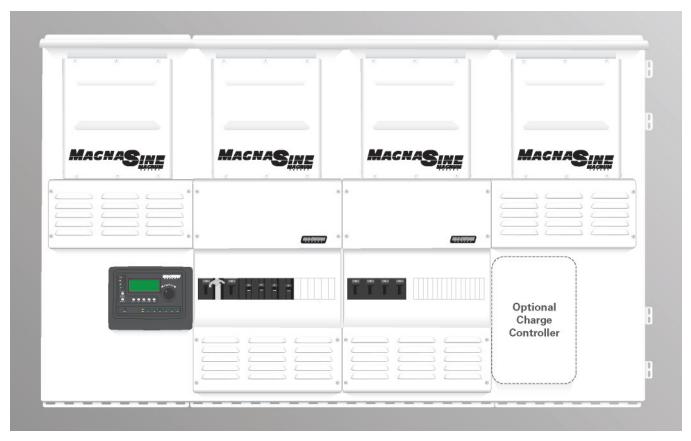
- Easy installation: all connections are frontmounted, including AC and DC breakers and the MPX.
- DC load breakers: fits either din rail or backmount DC load breakers.
- Convenient knockouts: knockouts on the side of the enclosure are compatible with charge controllers.

#### **INCLUDES:**

- One DC breaker 250A
- One 125A AC bypass breaker
- 1000A/100mv DC shunt
- Inverter AC input protection
- MPX extension includes AC/DC circuit protection and wiring

MPSH-30D

## **MPDH - Magnum Panel**



The MPDH shown with four inverters (sold separately), two MPX extensions to accommodate the additional inverters, three backplates, and the Magnum router.

The MPDH – Magnum Panel, Dual Enclosure, High Capacity – is designed to accommodate a maximum of four inverters with two enclosures – one for AC connections and one for DC connections.

#### **FEATURES**:

- More power capacity: the 125A bypass breaker and the 1000A DC shunt safely handle the power from larger systems.
- **Expandable:** start with the enclosures and just two inverters and in the future expand to up to four inverters, using the MPX.
- Easy installation: all connections are frontmounted, including AC and DC breakers and the MPX.

#### PART NUMBERS

- **Labor saving:** panel is prewired for fast installation, saving labor costs.
- DC load breakers: fits either din rail or backmount DC load breakers.
- **Convenient knockouts:** knockouts on the side of the enclosures are compatible with charge controllers.
- Separate AC and DC enclosures: for installers who prefer separate enclosures, the MPDH provides an easy solution.

#### **INCLUDES:**

- Two DC breakers 250A
- One 125A AC bypass breaker
- 1000A/100mv DC shunt
- Inverter AC input protection
- MPX extension includes AC/DC circuit protection and wiring

MPDH-30D

# **Magnum Panel Selection Guide**

#### **Inverter to Panel Selection**

Inverter to P	anel S	election					
Inverter Model	Qty	AC Wiring Configuration SISO = Single in, Single out - 120 VAC DIDO = Dual in, Dual out - 120/240 VAC	Required Panels MMP: 1 inverter o MPSL: 1-2 inverter MPSH: 2-3 inverter MPDH: 2-4 inverter MPX: Expansion b capability	only r capability er capability er capability	Options that allow future expansion of additional PAE inverters	Continuous Power Output at 25° C	
MS2012	1	SISO-60	MMP250-60S	See page 1	NA	2.0 KVA	
	1	DIDO	MMP250-30D	See page 1	NA	2.0 KVA	
MS2812	1	SISO-60	MMP250-60S	See page 1	NA	2.8 KVA	
	1	DIDO	MMP250-30D	See page 1	NA	2.8 KVA	
MS4024	1	SISO-60	MMP250-60S	See page 1	NA	4.0 KVA	
	1	DIDO	MMP250-30D See page 1		NA	4.0 KVA	
	2	SISO-60 (series stacked)	MPSL-60S + MPX-60S	See page 2	NA	8.0 KVA	
	2	DIDO	MPSL-30D + MPX-30D	See page 2	MPSH-30D + MPX-30D	8.0 KVA	
MS4024PAE	1	DIDO	MMP250-30D	See page 1	NA	4.0 KVA	
	2	DIDO x 2	MPSL-30D + MPX-30D	See page 2	MPSH-30D + MPX-30D or MPDH-30D	8.0 KVA	
	3	DIDO x 3	MPSH-30D + MPX-30D (x2)	See page 3	MPDH-30D + MPX-30D	12.0 KVA	
	4	DIDO x 4	MPDH-30D + MPX-30D (x2)	See page 4	NA	16.0 KVA	
MS4448PAE	1	DIDO	MMP175-30D	See page 1	NA	4.4 KVA	
	2	DIDO x 2	MPSL-30D + MPX-30D	See page 2	MPSH-30D + MPX-30D or MPDH-30D	8.8 KVA	
	3	DIDO x 3	MPSH-30D + MPX-30D (x2)	See page 3	MPDH-30D + MPX-30D	13.2 KVA	
	4	DIDO x 4	MPDH-30D + MPX-30D (x2)	See page 4	NA	17.6 KVA	

## **Reading Magnum Panel Part Numbers**

### Available Magnum Panel part numbers:

- MPSL-30D
- MPSL-60S
- MPSH-30D
- MPDH-30D

Magnum Panel part numbers follow the same three-part pattern: MPSL-30D, which may be broken down into:

MP	SL -	30D	30D	30 AAC Double-pole, input circuit breaker(s). x1 for single box or x2 for dual box
			60S	60 AAC Single-pole, input circuit breaker
			SL	Single box, low capacity – includes 60 AAC bypass, 500 ADC shunt and one 250 ADC breaker. Capability for 1-2 inverters
			SH	Single box, high capacity – includes 125 AAC bypass, 1000 ADC shunt and one 250 ADC breaker. Capability for 2-3 inverters
			DH	Dual box, high capacity – includes 125 AAC bypass, 1000 ADC shunt and two 250 ADC breakers. Capability for 2-4 inverters
			MP	Magnum Panel

Standard	Features					Optional Features
Nominal DC Input Voltage	AC Input Voltage & Frequency	Inverter AC Output Voltage & Frequency	Battery Charger Maximum Output at 25° C	AC Input / Pass-through Capacity Breaker Rating at 25° C	AC Input / Bypass with Interlock	Maximum DC Load Breakers (13mm width / back mount)
12 VDC	120 VAC @ 60 Hz	120 VAC @ 60 Hz	100 amps DC	60 amps AC	D60 amps AC	8 / 4
12 VDC	120 / 240 VAC @ 60 Hz	120 VAC @ 60 Hz	100 amps DC	D30 amps AC	D60 amps AC	8 / 4
12 VDC	120 VAC @ 60 Hz	120 VAC @ 60 Hz	125 amps DC	60 amps AC	D60 amps AC	8/4
 12 VDC	120 / 240 VAC @ 60 Hz	120 VAC @ 60 Hz	125 amps DC	D30 amps AC	D60 amps AC	8 / 4
24 VDC	120 VAC @ 60 Hz	120 VAC @ 60 Hz	105 amps DC	60 amps AC	D60 amps AC	8 / 4
24 VDC	120 / 240 VAC @ 60 Hz	120 VAC @ 60 Hz	105 amps DC	D30 amps AC	D60 or D 125 amps AC	8/4
24 VDC	120 / 240 VAC @ 60 Hz	120 / 240 VAC @ 60 Hz	105 amps DC x 2	D60 amps AC	D60 or D 125 amps AC	10 / 5
24 VDC	120 / 240 VAC @ 60 Hz	120 / 240 VAC @ 60 Hz	105 amps DC x 2	D60 amps AC	D60 or D 125 amps AC	10 / 5
24 VDC	120 / 240 VAC @ 60 Hz	120 / 240 VAC @ 60 Hz	105 amps DC	D30 amps AC	D60 amps AC	8 / 4
24 VDC	120 / 240 VAC @ 60 Hz x 2	120 / 240 VAC @ 60 Hz x 2	105 amps DC x 2	D30 amps AC x 2	D60 or D 125 amps AC	10 / 5
24 VDC	120 / 240 VAC @ 60 Hz x 3	120 / 240 VAC @ 60 Hz x 3	105 amps DC x 3	D30 amps AC x 3	D125 amps AC	NA
24 VDC	120 / 240 VAC @ 60 Hz x 4	120 / 240 VAC @ 60 Hz x 4	105 amps DC x 4	D30 amps AC x 4	D125 amps AC	15 / 7
48 VDC	120 / 240 VAC @ 60 Hz	120 / 240 VAC @ 60 Hz	60 amps DC	D30 amps AC	D60 amps AC	8 / 4
48 VDC	120 / 240 VAC @ 60 Hz x 2	120 / 240 VAC @ 60 Hz x 2	60 amps DC x 2	D30 amps AC x 2	D60 or D 125 amps AC	10 / 5
 48 VDC	120 / 240 VAC @ 60 Hz x 3	120 / 240 VAC @ 60 Hz x 3	60 amps DC x 3	D30 amps AC x 3	D125 amps AC	NA
48 VDC	120 / 240 VAC @ 60 Hz x 4	120 / 240 VAC @ 60 Hz x 4	60 amps DC x 4	D30 amps AC x 4	D125 amps AC	15 / 7

### Available Magnum Panel Extension part numbers:

MPX-30D

MPX-60S

# Mini Magnum Panel part numbers:

Mini Magnum Panel part numbers follow the same three-part pattern: MMP175-30D, which may be broken down into:

	ММ	IP	175	-	30D	30D	30 AAC Double-pole, input circuit breaker(s). x1 for single box or x2 for dual box
ſS						60S	60 AAC Single-pole, input circuit breaker
Ū						175	175 ADC breaker
y						250	250 ADC breaker
						 MMP	Mini Magnum Panel

Magnum Panel Extension part numbers follow the same two-part pattern: MPX-30D, which may be broken down into:

MPX - 30D	30D	Ships with one 30 AAC Double-pole, input circuit breaker, one 250 ADC breaker, and all AC and DC inverter wiring
	60S	Ships with one 60 AAC Single-pole, input circuit breaker, one 250 ADC breaker, and all AC and DC inverter wiring
	MPX	Magnum Panel Extension Box – 1 unit capacity

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