

Retail Price list effective July1, 2008

NOTE: ALL E-PANELS HAVE SWITCHED TO LEFT HAND HINGE AS THE STANDARD



E-Panel, OutBack version ETL listed for the US and Canada

Model No.	Price	Description	shipping Size and Weight
MNE125ST-L	\$489	Gray steel with 125a/125 VDC inverter breaker	14 X 12 X 28" 28 Lb.
MNE175ST-L	\$529	Gray steel with 175a/125 VDC inverter breaker	14 X 12 X 28" 29 Lb.
MNE250ST-L	\$529	Gray steel with 250a/125 VDC inverter breaker	14 X 12 X 28" 29 Lb.
MNE125AL-L	\$529	White Alum with 125a/125VDC inverter breaker	14 X 12 X 28" 19 Lb.
MNE175AL-L	\$559	White Alum with 175a/125VDC inverter breaker	14 X 12 X 28" 20 Lb.
MNE250AL-L	\$559	White Alum with 250a/125VDC inverter breaker	14 X 12 X 28" 20 Lb.
MNE125STS-L	\$559	Stretched Gray steel with 125a/125VDC breaker	
MNE175STS-L	\$599	Stretched Gray steel with 175a/125VDC breaker	
MNE250STS-L		Stretched Gray steel with 250a/125VDC breaker	
MNE175AL-PLU	US \$639	Stretched aluminum OB with MX60/Classic mou	inting on the door 25 Lb.
MNE250AL-PLU	US \$639	Stretched aluminum OB with MX60/Classic mou	inting on the door 25Lb.



MNERIGHTdoorST \$75 Gray Steel RH door with LH Chrg Cntrl Brkt for narrow OB chassis MNERIGHTdoorAL \$75 Wht Alum RH door with LH Chrg Cntrl Brkt for narrow OB chassis

Note: For E-Panels built as Right hand units, add a "-R" to the end of the model number instead of the – L. Right Hand versions have the hinge on the right, circuit breakers on the right and charge control bracket on the left

Note: The Stretched version (STS) utilizes the Magnum sized chassis to provide 5" additional wiring room and includes more wiring friendly AC&DC bus bars. Each bus bar has 14 set screw connection points, (no ring terminals required)

Note: All E-Panels now come with a side plate that accommodates up to three panel mount breakers like the MNEDC80. These side plates also accommodate the OB Flexnet battery status monitor on STS units. All OB E-Panels also now come with a Mate mounting bracket, PV+ busbar and 80 amp bat + busbar.



Top left picture: narrow OutBack gray steel shown as it comes with all the parts
Second left picture: Stretched OutBack shown with the OutBack surge arrestor for grid tie applications
Third left picture: Stretched OutBack gray steel shown as it comes with all the parts

Bottom left picture: OutBack Plus white aluminum shown with an MX60 and FX inverter mounted Bottom right picture: Right side of all left hand units showing Mate

mtg bracket and breaker knockouts. The Mate mtg bracket has a solid front with matching mounting holes. There are three panel mount knock outs above the Mate mtg bracket. The GFCI outlet knockout is hidden by the MX60, but available for use with the Classic.



The all aluminum E-Panel Plus has accommodations for the OB surge arrestor

For further info, See "E-Panels Explained at www.midnitesolar.com



E-Panel Lite, for use with SW, DR, RS etc. (Same size as OutBack narrow)

MNE125LT	\$459	Gray steel with 125a/125VDC inverter breaker	14 X 12 X 28" 22 Lb.
MNE175LT	\$499	Gray steel with 175a/125VDC inverter breaker	14 X 12 X 28" 22 Lb.
MNE250LT	\$499	Gray steel with 250a/125VDC inverter breaker	14 X 12 X 28" 22 Lb.
MNE125ALT	\$499	White Alum with 125a/125VDC inverter breaker	14 X 12 X 28" 15 Lb.
MNE175ALT	\$539	White Alum with 175a/125VDC inverter breaker	14 X 12 X 28" 15 Lb.
MNE250ALT	\$539	White Alum with 250a/125VDC inverter breaker	14 X 12 X 28" 15 Lb.

Note: all Lite's come with a LH door, inverter breaker, pre-wired AC input and bypass, 500 amp/50mV shunt, AC terminal blocks, din rails, wall mounting brackets, instructions and lots of hardware. Custom Lite E- Panels can be built in the stretched enclosure in 120V and 120/240. Call for pricing. ETL listed for the US and Canada



E-Panel, Magnum version ETL listed for the US and Canada

Model Number	Price	Description	shipping Size and Weight
MNE175STM-L	\$599	Gray steel with 175a/125VDC inverter breaker	18 X 11 X 28" 39 Lb.
MNE250STM-L	\$599	Gray steel with 250a breaker for MS4024/ MS28	312 18 X 11 X 28" 39 Lb.
MNE250ALM-L	\$639	White alum with 250a breaker for MS4024/ MS28	312 18 X 11 X 28" 31 Lb.
MNErightdoorSTM	\$75	Gray Steel right hand hinge door with LH Chg	Cntrl Brkt for wide chassis



The Magnum E-Panel comes with inverter breaker, 2/0 inverter cables, pre-wired AC input and bypass, 500amp 50mV shunt, AC terminal blocks, 80 amp DC positive and DC negative bus bars, PV input bus bar, din rails, 3 panel mount breaker knockouts, Ground bus bar, DC wiring cover, top shield, remote display mounting bracket, wall mounting brackets, charge controller bracket and lots of hardware and grommets.

The picture left shows a 120VAC Magnum E-Panel wired with an AC input/output and PV lightning arrestor, two 80 amp panel mount charge control breakers, the Magnum remote display and MPPT charge control bracket in place. Note that panel mount breakers exit the

opposite side as din rail mount breakers.



E-Panel, Magnum AE version 120/240VAC ETL listed for the US and

MNE175STM-L-240 \$799 White steel for 120/240VAC in & out for MS4448-AE 18 x 11 x 28" 42 Lb.

MNE250STM-L-240 $\,$ \$799 White steel for 120/240VAC in & out for MS4024-AE 18 x 11 x 28" 42 Lb

The 120/240 E-Panels come with features above plus terminal bus bars for 120/240VAC input and output





MNE125STMM-L (\$529.00 list)

Designed for the Magnum Energy MM series inverters. These steel left hand units come with pre-wired AC bypass and AC input, 125 amp inverter battery breaker, AC input and output busbars, PV+ input busbar, 80 amp Battery + busbar, battery- busbar, chassis ground busbar, 500 amp shunt, charge control bracket, 2AWG inverter DC cables, mounting hole in door for MMRC control panel, din rails for 6 additional AC or DC breakers, knock outs for 3 panel mount breakers, GFCI knockout, mounting brackets,



DR and **TR** E-Panels

Sounds strange but now that the DR inverter has been discontinued, we designed an E-Panel for it!

This unit also works for the replacement "TR" inverter from Xantrex also. It comes with all the normal E-Panel features such as inverter cables, PV+ busbar, battery+ busbar, 50 amp AC input/output bypass, 50 amp AC input disconnect, 175 or 250 amp 125VDC inverter battery breaker, AC busbars, covers for DC and AC end, wall mounting brackets and hardware. AC breakers are rated at 277VAC.

MNE175DR/TR-L \$559 list shipping weight \$30 Lb.

MNE250DR/TR-L \$559 list shipping size 11" x 14" x 28"



Export E-Panels

All included AC bypass and input disconnect breakers are rated for 277 VAC. Export versions of our standard E-Panels are made using Blue and Brown wire and terminal bus bar insulators. Add an "E" to the end of any model number to create an E-Panel suited for Africa, Australia, New Zealand or Europe. Prices are the same as regular E-Panels.

The Nottagutter Price \$659

Use up to four UltraLite E-Panels with this system. Competing systems for stacking run too hot for reliable operation so we moved the inverters apart. The Nottagutter accepts two E-Panels on top and two E-Panels below. Features include DC+ and DC- busbars to accommodate up to four inverter cables plus battery cables as well as auxiliary DC circuits



such as charge controllers. 120/240V AC input, AC output, Neutral and

ground busbars. 60 amp AC Bypass with four 50 amp output breakers standard. Charge controllers mount on the top middle or on each end with optional charge control brackets.

Gray aluminum shipping size 40" x 16" x 6" 25 Lb.



OutBack UltraLite E-Panels are the narrow variety and come in steel or aluminum. Magnum UltraLites come in steel only. These E-Panels are intended to go with the Nottagutter system. Each UltraLite comes with a 50 amp AC input disconnect, 125, 175 or 250 amp inverter breaker, ground busbar and the normal hardware and DC covers normally associated with E-Panels. They do not include an AC Bypass switch or AC and DC busbars.

UltraLite Part number examples:

MNE125ALULite-L 125 amp narrow OutBack aluminum Left hand UltraLite E-Panel Price \$479 MNE175STULite-L 175 amp narrow OutBack steel Left hand UltraLite E-Panel Price \$479 MNE250STMULite-L 250 amp wide Magnum steel Left hand UltraLite E-Panel Price \$499 Price \$499 Price \$499 Price \$499 Price \$499 Price \$499 Price \$490 Price \$490

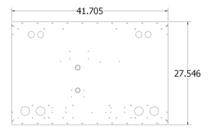


Dual Backplate \$239 list

16 gauge gray steel accepts one or two E-Panels, (wide or narrow). Wires route behind the 2" thick plate for a clean installation. Rear cover plates enclose wires from mounting surface.

Shipping size: 48" x 31" x 3" 25 Lb.





NEW!!! MNE250XW E-Panel for a single Xantrex XW inverter/charger The XW inverter is mounted directly above the E-Panel for a 16" assembly







Features: 250 amp inverter battery breaker, 2 separate AC inputs for generator and utility, knockouts for up to seven din rail mount DC breakers and six panel mount breakers. Massive tin

plated copper bus bars directly connect to the XW's

battery terminals, bus bars for AC inputs, AC output, neutral, ground, PV + in, PV-

in, Bat +, Bat-, 500 amp shunt, metal dead front behind the reversible door, Charge controllers mount to either side or both sides at once for dual controllers. AC bypass can be configured as input & output on/off as well as AC bypass. The XW MPPT controller requires no mounting bracket. MX60, MF80 and Classic



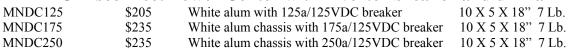
require Right or Left E-Panel charge control mounting brackets.

Right hand bracket furnished standard.

Price \$950 Size of E-Panel: 16" wide, 18" tall, 8" deep Boxed: 20,22, 12 Weight: 42 pounds

Left hand Charge control bracket: \$20.00 < 1 Lb

Mini – DC Disconnect Power Center with inverter breaker and din rail



Note: Add –Left to model for left hand breaker placement (DR inverters)

The MNDC comes with a din rail for 5 additional DC breakers for DC loads, charge controller disconnect, battery status monitor feed etc. included is a ground bus, 5/16"bonding battery

minus stud. Mounting holes for a 500 amp shunt are built in.

ETL listed for US and Canada

MNPV Combiners ETL listed for the US and Canada up to 3/12 pitch

MNPV6 \$109 Gray alum rainproof enclosure with insulating dead front, will accept six 150VDC breakers or 4 600VDC touch safe fuse holders. Includes 14 position PV negative bus bar, 14 position ground bus bar, 120 amp Plus bus bar for breakers and 60 amp bus bar for fuses Boxed size: 9" x 14" x 4" weight: 4 Lbs.

MNPV3 \$89 Gray alum rainproof enclosure without deadfront, will accept three 150VDC (MNEPV) breakers. Includes a 60 amp plus bus bar, 6 position PV negative bus bar and a 6 position ground bus bar. 11" x

5" x 4" 2lbs.

or?

Coming this Fall is the 12 position version (8) fuse positions \$139 Also coming this Fall is a 16 position combiner that comes with 16 touch safe fuse holders \$499 list

Baby Box enclosure for 1-4 MNEPV or MNEAC din rail breakersGeneral use enclosure for retrofits, small inverter disconnect, PV disconnect, AC or DC distribution

nect, AC or DC distribution



Dual 50 amp 240VAC Transfer Switch in a small box

Non-listed due to small size. 8AWG max Price \$109.00 3"x3"x7" box with 1" KO in each end 2 Lbs.

Options for E-Panels, MNDC, PV Combiners and Baby Box



MNEPV series din rail mount breakers \$13.00 **150VDC** din rail mount breaker (13mm wide) <1 Lb. Part number example: MNEPV15 Always in stock: 1,2,3,4,5,6,7,8,9,10,12,15,20,30,40,50,63 amps

15011001

MNEPV breakers are the same as CBI QY breakers available elsewhere except ours are 150VDC! 150VDC ETL listed in the US and Canada



MNDC-GFP \$69 63 amp 150VDC DC ground fault protector (UL listed breaker assy) 2 Lb. NEC2008 requires DC-GFP's in **ALL** solar installations



MNDC-GFP80 \$89 80 amp 125VDC DC ground fault protector (UL listed breaker assy) 2 Lb. ½ amp trip mechanism connects between battery negative and earth ground NEC2008 requires DC-GFP's in **ALL** solar installations



MNEAC10, 15, 20 \$15 15-60 amp 120VAC UL489A din rail mount (13mm wide) <1 Lb. MNEAC30, 40, 50, 60 \$15 15-60 amp 120VAC UL1077 din rail mount (13mm wide) <1 Lb. Note: UL489A is the branch circuit rating, UL1077 is for supplementary protection



Not so standard breakers for field use, but are installed at the factory in MidNite products

(Protrusion through the panel is shorter than the black breakers) MNEAC15QZD white 15 amp 277VAC UL1077 single pole \$15.00 MNEAC30QZD white 30 amp 277VAC UL1077 single pole \$15.00

\$34.00 2 Lb. Also available in 10 and 15 amps.



MNEAC50QZD white 50 amp 277VAC UL1077 single pole \$15.00 MNEAC30QZD2P white 30 amp 277VAC UL1077 double pole \$30.00 MNEAC50QZD2P white 50 amp 277VAC UL1077 double pole \$30.00 MNEAC30QZD3P white or black 30 amp 277VAC UL1077 triple pole \$54 1.5" wide MNEAC50QZD3P white or black 50 amp 277VAC UL1077 triple pole \$54 1.5" wide



MNEDC80 \$20 80 amp 125VDC Panel Mount. $\frac{1}{4}$ " studs / $\frac{3}{4}$ " wide <1 Lb. This is the same as the OBDC panel mount breakers available elsewhere (comes with mounting screws)



MNEDC125 \$54 125amp 125VDC ½" studs / 1" wide panel mount 2 Lbs. This is the same as OBDC panel mount breakers available elsewhere but with ½" studs (comes with mounting screws)



MNEDC175 & MNEDC250 \$109 125VDC 3/8" studs 1.5" wide panel mount 3 Lbs Same as OBDC's



High voltage breaker

MNEPV50-250 50 amp 250VDC UL489 listed din rail mount breaker

This is the first in a series of breakers that is necessary for 250 volt charge controllers.

Terminal Bus Bars



MNTBR (Red) Four 1/0 & eleven #6 useable wire slots. Comes with two sizes of 10-32 screws MNTBW (White) Four 1/0 & eleven #6 useable wire slots. Comes with two sizes of 10-32 screws MNTBB (Black) Four 1/0 & eleven #6 useable wire slots. Comes with two sizes of 10-32 screws Bus Bar 4.63" UL and CSA recognized, Made in USA. Insulators ETL recognized, Designed by MidNite Solar and Made in China \$17.00 <1Lb. Remove the plastic insulators for ground bus applications. A dimensioned drawing is on the MidNite website as "Long MNTB Dimensions"



MNSBBR, MNSBBW (Midnite Short Busbar) Shorter version of the insulated bus bars above. These are useful for PV+ input on the narrow OB E-Panel and for a separate PV- bus bar for charge controllers that require them. Four #6 and two 1/0 wire slots. \$15.00 <1 Lb. A dimensioned drawing is on the MidNite website as "Short MNTB Dimensions"



Ground Bus Bar (model# MNGBB) 3.45" long with Green screws! Two 1/0 & seven #6 wire slots. Comes with mounting screws \$12.00 Made in USA, UL and CSA recognized < 1 Lb.



Short Bus Bar, Naked (model# MNSBBN)

2.3" long. Two 1/0 & four #6 wire slots. Comes with mounting screw& nut #10-32 x 7/8" \$10.00 Made in USA, UL and CSA recognized <1Lb.



Tin plated copper plate. .063" x 2.1" x 1.5" One 3/8", five .250, two .203" holes \$12.00 <1 Lb. Used on MNDC shunts for an additional bat minus connections.



MNPV6 BUSBAR This .093" thick copper bus has six fingers spaced at ½" (13mm) intervals Two box lugs are provided to accommodate 14-1/0 AWG wire. \$15.00 <1Lb.



MNPV6 FUSE BUSBAR This .063" thick copper bus has four fingers spaced at ³/₄" (19mm) intervals One box lug is provided that accommodates 14-1/0 AWG wire. \$13.00 <1Lb.



MNPV3 BUSBAR This .093" thick copper bus has three fingers spaced at $\frac{1}{2}$ " (13mm) intervals one box lug is provided to accommodate 14-1/0 AWG wire. \$13.00 <1Lb.



Shunt 500amp/50mV includes taptite mounting screws 2 Lbs. \$36.00 Has two 8-32 tapped holes on one end to attach a bus bar. This is the industry standard shunt.



Shunt wire 36 inches long. Two twisted pair, one red& black, one blue & white Includes two ring terminals <1 Lb. \$12.00 Bogart Engineering recommends twisted wire.

Order the MNEPV2 2 amp breaker, shunt and wire to hook up the Trimetric to a MNDC175 or 250



MNTS Touch Safe Fuse Holder Ferraz USM1 1000VDC 30 amp Din rail mount \$13.00 Use in the MNPV6 combiner for high voltage string inverters <1 Lb.



MNATM6, 10 or 15 600VDC 6, 10 or 15 amp fuse to go with MNTS fuse holder \$13.00 <1Lb. Call for availability of other amperage.

MNBE-A \$425 Battery Enclosure with locking door. Holds three group 31 or 27 sealed batteries per shelf side by side or two per shelf end to end. Also holds one 8D per shelf. Two cabinets can be stacked horizontal or vertical for expansion. Remove middle shelf for taller batteries. 2" knock outs on top and sides. Gray powder coated steel. Ships knocked down.

Enclosure outside dimensions: 29" wide x 14.5" deep x 27.25" tall

Boxed size & weight: 30" x 32" x 7.5" 71 Lbs.

ETL listed for the US and Canada for indoor use only





Photo courtesy of Charlie Howden Hawaii

MNBE-B \$605 Battery Enclosure with locking door. Holds eight group 31 or sealed golf cart sized batteries. Gray powder coated steel. Two cabinets can be stacked horizontal or vertical for expansion. Ships knocked down in two cartons. ETL listed for the US and Canada **for indoor use only**

Enclosure size: 33.6" wide x 15.25" deep x 34.2" tall

Boxed size & weight: Box 1 of 2 Doors and Back 18" x 8" x 36" 40 Lbs.

Box 2 of 2 Sides, Top and Shelves 18" x 9" x 37" 62 Lbs.







MNBE-C \$849 Battery Enclosure with locking door. Holds twelve group 31 or sealed golf cart sized batteries and even the 14" tall PVX-3050T from Concorde. Gray powder coated steel. Two cabinets can be stacked horizontal for expansion. Enclosure size: 36.5" wide x 16" deep x 55" tall/190 Lbs including pallet (freight truck only)

ETL listed for the US and Canada for indoor use only







Back Up Systems supplied with or without Magnum Energy Inverters



MNBE-C-250 with Magnum inverter installed





Flip down door hides a compliment of breakers



MNBE-C-250 Final assembly by Backuppowersource.com



MNBE-C-175 built for battery back up grid tie by SunWize Technologies Gen/Grid versions have a transfer switch that manually selects between utility power and a 15 amp AC inlet to allow a portable generator to be plugged in for recharging during an outage



Pre-wired Power Back Up Systems in B&C series cabinets



Here's Tom and Robin proudly displaying their latest craftsmanship. These Power Back Up systems are available as shown in the C sized cabinet as well as our smaller B size. The C size can accommodate up to 300 amp hours of AGM batteries at 48VDC. That is actually a pretty substantial battery bank for a power back up or grid tie system. These systems come with or without Magnum Energy inverters and can be configured outside of MidNite for the OutBack Grid tie and MX60 as well. Magnum inverters can be installed by Midnite for additional cost.

Standard features:

- •175 or 250 amp breaker with 2/0 inverter DC cables that fit either Magnum or OutBack inverters.
- •AC ground bus bar
- •AC input and output terminal blocks for field wiring connections
- •GFCI outlet and associated 15 amp breaker wired
- •Two 15 amp and one 20 amp load circuit breakers wired
- •50 amp AC breakers wired with 8AWG wire. (AC input disconnect and AC bypass switch)
- Bus bar on battery disconnect breaker for connecting two parallel strings of batteries
- •500 amp/50mV shunt for connection of battery and inverter negatives with bat negative busbar.
- •Long bolt on shunt to accommodate multiple lugs
- AC inlet for portable generator (Leviton #5278C) recessed power inlet module on **gen/grid models**
- •50 amp utility/15 amp generator transfer switch on **gen/grid models**
- Knockout spaces for four additional AC or DC breakers on regular version
- Mounting hardware for Magnum or OutBack inverter

- •keyed lock supplied for door (keeps unauthorized people out)
- •Dual hinged doors with recessed handle on right hand door.
- •Flip down panel to conceal circuit breakers from view
- •2" side knock outs to accommodate additional battery enclosures side by side
- •B cabinet has one shelf for batteries and C cabinet has two shelves

ETL listed for the US and Canada for indoor use only

Models with generator transfer switch:

"B" cabinet Models: MNBE-B-175 Gen/Grid or MNBE-B-250 Gen/Grid \$2329.00 list "C" cabinet Models: MNBE-C-175 Gen/Grid or MNBE-C-250 Gen/Grid \$2449.00 list

Regular models without transfer switch, but with extra breaker knock outs

"B" cabinet Models: MNBE-B-175 Regular or MNBE-B-250 Regular \$2229.00 list "C" cabinet Models: MNBE-C-175 Regular or MNBE-C-250 Regular \$2349.00 list

Something new!

Large Back up kit 120VAC \$750

Large Back up kit 240VAC \$800

Large Back up kit 120VAC /GEN \$850

Large Back up kit 240VAV/GEN \$900

These kits provide all the necessary breakers and brackets to assemble your own Power back up system like the ones shown above. The /GEN versions have the extra generator input transfer switch and AC inlet. Use these kits with our "B" or "C" battery enclosures.

Back Up Kit \$359

This kit allows an installer or do-it yourselfer a chance to get into a battery backed up power system at a very modest price. The kit includes all of the following:

Battery breaker (175 or 250 amp), 50 amp AC bypass assembly, 50 amp AC input breaker, two 15 amp load circuit breakers, Din rail support, breaker cover plate, AC terminal blocks, hardware and instructions. Use with MNBE-B or C battery enclosure purchased separately.

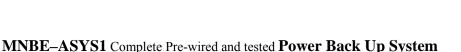












Includes: MNBE-A cabinet, MNE175STM E-Panel, MS4024 4000W Magnum Energy Sine Wave inverter/charger, ME-RC50 remote, two 15 amp and one 20 amp load breakers, Battery cables for four group 31 batteries, 14" long interconnecting conduit. Batteries not included. \$4529.00 Ships on pallet, freight only. 230 Lbs. This has been very popular for dentist and doctor office back up. ETL listed for the US and Canada for indoor use only

