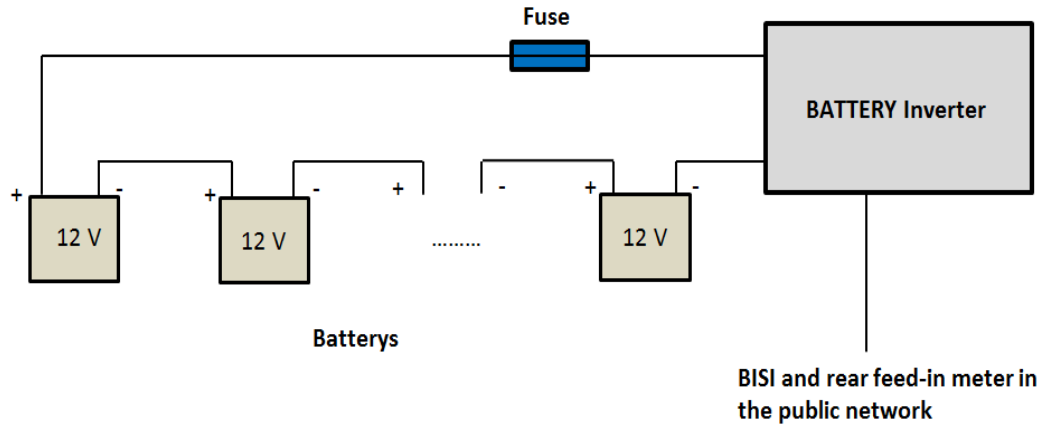


Comprehensive data sheet BatteryInvert





Depending 2-8 lead batteries (per 12V) can be connected in to an inverter BATTERY can be connected. Alternatively, other Storage battery (Li, NiMH, NC) be used. The number of cells should be as which they are elected to Input voltage range the inverter BATTERY fit.

Advantages

- safe electrical disconnection to the battery
- the energy stored in a battery can be efficiently into the electricity network (home network) are fed
- Charging mode (reverse mode) from the mains in Type C
- Input voltage control range individually adaptable to battery type (on request)
- Excess supply configurable on a full battery
- Transient (DC + AC varistors)
- Made in *Germany*

Battery inverter and standard (new) with control potentiometer (poti):

The battery inverters are specially designed to meet the requirements of a battery (accumulator) customized devices. They are thus suitable for example to supplement already installed stand-alone systems with photovoltaic or wind generators for surplus feeding into the home network or public network. Reaches the battery by charging their final charge voltage, the device (from the configured turn-on) starts with the mains supply. Lit the blue LED, battery inverter power feeding into the grid. The operating voltage is kept at a constant value. Thus it is achieved that only the excess energy from the generator is fed to network. The state of charge of the battery is thus kept at about 90%. If the mains power is fed to a value below the consumption of the unit (depending on type 2-10W) from the inverter switches off again. Discharge the battery you will need either an additional stand-alone inverter or DC loads corresponding to the DC voltage of the battery system used. When the device type potentiometer can discharge the energy stored in the battery, also take place in the grid. The potentiometer on the front panel can be about the voltage setting of discharge of the battery set between 20-100%.

Battery inverter type 0-10V (or -10 to +10 V):

The battery inverter type 0-10V provides the ability to specify the input control voltage via an analog control voltage. This allows the BatteryInvert example controlled by a PLC. The external control voltage source must be electrically isolated from the battery voltage! It may therefore request to the battery to 50% (or 30%) discharged. Moreover, there is also the possibility of external demand in excess of the power grid to recharge the battery from the mains. If 3 Battery inverter for three-phase supply on the input side parallel to a battery, then the 0-10V control signal from each of 3 galvanically isolated 0-10V sources must be delivered.

The control voltage is directly proportional to the input voltage offset.
Example, lead acid battery!

If the inverter example up to 46V down to work, then you can boot with the control 0-10V to 56V the WR!
You can also control with 0-20V (-10 to +10 V or) are then obtained as 44V-64V!

Therefore applies to all battery inverter:

To set the load-Entladeschwellen correctly, please enter in your order to, for what type of battery you want to use the inverter (lead, Lipo, LiFe, ...), the corresponding voltage-switching thresholds and the input voltage control range.

Comprehensive data sheet BatteryInvert



Device type	BI 300-24	BI 300-48	BI 600-24	BI 600-48	BI 800-96
Power facts					
Input peak power (10 min.)	320 W	350 W	620 W	660 W	900 W
Rated power output AC (TU = 25°C, 1h)	230 W	300 W	460 W	550 W	750 W
Duration input power (TU = 25°C)	200 W	200 W	450 W	480 W	700 W
Max. Output power AC	290 W	315 W	560 W	590 W	830 W
Max. efficiency	93,00%	94,00%	95,00%	96,00%	95,60%
Power supply from = Internal consumption at the power	2 W	2 W	5 W	5 W	5 W
Standby losses DC	0,5 W	0,5 W	0,5 W	0,7 W	0,7 W
Voltage	24 V DC	48 V DC	24 V DC	48 V DC	96 V DC
Max. Input voltage	50 V DC (optional up to 70 V on request)	80 V DC (optional up to 110V on request)	50 V DC (optional up to 70 V on request)	80 V DC (optional up to 110V on request)	160 V
Characteristic curve voltage range	18 - 32 V DC	42 – 70 V DC	18 - 32 V DC	42 – 70 V DC	70 – 128 V DC
Turn on	28 V DC (adjustable from the factory or via control inputs)	56 V DC (adjustable from the factory or via control inputs)	28 V DC (adjustable from the factory or via control inputs)	56 V DC (adjustable from the factory or via control inputs)	110 V DC (adjustable from the factory or via control inputs)
Output voltage	230 V AC +10 / -20 %	230 V AC +10 / -20 %	230 V AC +10 / -20 %	230 V AC +10 / -20 %	230 V AC +10 / -20 %
network monitoring	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz
Powerfactor	1 regulated	1 regulated	1 regulated	1 regulated	1 regulated
Control behavior	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation
Enviroment					
Enviromental temperature	-25° bis +70° C	-25° bis +70° C	-25° bis +70° C	-25° bis +70° C	-25° bis +70° C
Permitted humidity	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %
Circuit feedback	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3
Sound emission	35 dB	35 dB	35 dB	35 dB	35 dB
Safety class of case	IP 54 / Protective earthing I	IP 54 / Protective earthing I	IP 54 / Protective earthing I	IP 54 / Protective earthing I	IP 54 / Protective earthing I
Potential separation	NF-toroidal transformer	NF-toroidal transformer	NF-toroidal transformer	NF-toroidal transformer	NF-toroidal transformer
Testmark	CE	CE	CE	CE	CE
Over temperature protection	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown
Dimensions	264/300 x 475 x 157 mm	264/300 x 475 x 157 mm	264/300 x 475 x 157 mm	264/300 x 475 x 157 mm	331/372 x 533 x 204 mm
Weight	12 kg	12 kg	15 kg	15 kg	16 kg

Technical change and errors excepted!

Comprehensive data sheet BatteryInvert



Device type	BI 1000-24	BI 1000-48	BI 1200-24	BI 1200-48	BI 1200-96
Power facts					
Input peak power (10 min.)	1100 W	1100 W	1200 W	1300 W	1300 W
Rated power output AC (TU = 25°C, 1h)	900 W	800 W	950 W	1100 W	1000 W
Duration input power (TU = 25°C)	800 W	850 W	1000 W	1050 W	1050 W
Max. Output power AC	1000 W	1000 W	1080 W	1200 W	1140 W
Max. efficiency	94,40%	95,00%	93,80%	96,40%	96,00%
Power supply from = Internal consumption at the power	7 W	7 W	8 W	8 W	8 W
Standby losses DC	0,5 W	0,7 W	0,5 W	0,7 W	0,8 W
Voltage	24 V DC	48 V DC	24 V DC	48 V DC	96 V DC
Max. Input voltage	50 V DC (optional up to 70 V on request)	80 V DC (optional up to 110V on request)	50 V DC (optional up to 70 V on request)	80 V DC (optional up to 110V on request)	160 V
Characteristic curve voltage range	22 - 36 V DC	42 – 68 V DC	22 - 36 V DC	42 – 70 V DC	70 – 128 V DC
Turn on	28 V DC (adjustable from the factory or via control inputs)	56 V DC (adjustable from the factory or via control inputs)	28 V DC (adjustable from the factory or via control inputs)	56 V DC (adjustable from the factory or via control inputs)	110 V DC (adjustable from the factory or via control inputs)
Output voltage	230 V AC +10 / -20 %	230 V AC +10 / -20 %	230 V AC +10 / -20 %	230 V AC +10 / -20 %	230 V AC +10 / -20 %
network monitoring	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz
Powerfactor	1 regulated	1 regulated	1 regulated	1 regulated	1 regulated
Control behavior	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation
Environment					
Environmental temperature	-25° bis +70° C	-25° bis +70° C	-25° bis +70° C	-25° bis +70° C	-25° bis +70° C
Permitted humidity	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %	0 - 95 %
Circuit feedback	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3
Sound emission	35 dB	35 dB	35 dB	35 dB	35 dB
Safety class of case	IP 54 / Protective earthing I	IP 54 / Protective earthing I	IP 54 / Protective earthing I	IP 54 / Protective earthing I	IP 54 / Protective earthing I
Potential separation	NF-toroidal transformer	NF-toroidal transformer	NF-toroidal transformer	NF-toroidal transformer	NF-toroidal transformer
Testmark	CE	CE	CE	CE	CE
Over temperature protection	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown
Dimensions	331/372 x 533 x 204 mm	264/300 x 475 x 157 mm	331/372 x 533 x 204 mm	331/372 x 533 x 204 mm	331/372 x 533 x 204 mm
Weight	21 kg	16 kg	18 kg	18 kg	18 kg

Technical change and errors excepted!

Comprehensive data sheet BatteryInvert



Device type	BI 1600-48	BI 2000-48	BI 2400-96		
Power facts					
Input peak power (10 min.)	1700 W	2200 W	2600 W		
Rated power output AC (TU = 25°C, 1h)	1400 W	1700 W	2000 W		
Duration input power (TU = 25°C)	1300 W	1700 W	1800 W		
Max. Output power AC	1540 W	1950 W	2200 W		
Max. efficiency	93,80%	93,40%	95,20%		
Power supply from = Internal consumption at the power	8 W	10 W	12 W		
Standby losses DC	0,7 W	0,7 W	0,9 W		
Voltage	48 V DC	48 V DC	96 V DC		
Max. Input voltage	80 V DC (optional up to 110V on request)	80 V DC (optional up to 110V on request)	160 V		
Characteristic curve voltage range	42 – 70 V DC	47 – 78 V DC	72 – 130 V DC		
Turn on	56 V DC (adjustable from the factory or via control inputs)	56 V DC (adjustable from the factory or via control inputs)	110 V DC (adjustable from the factory or via control inputs)		
Output voltage	230 V AC +10 / -20 %	230 V AC +10 / -20 %	230 V AC +10 / -20 %		
network monitoring	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz	POWER over and under voltage +10 / -20%, frequency monitoring 50 Hz +1.5 / -2.5 Hz		
Powerfactor	1 regulated	1 regulated	1 regulated		
Control behavior	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation	Battery operating characteristic curve / power limitation		
Environment					
Environmental temperature	-25° bis +70° C	-25° bis +70° C	-25° bis +70° C		
Permitted humidity	0 - 95 %	0 - 95 %	0 - 95 %		
Circuit feedback	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3	DIN VDE 0838, EN 60555, EN 50178, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3		
Sound emission	35 dB	35 dB	35 dB		
Safety class of case	IP 54 / Protective earthing I	IP 54 / Protective earthing I	IP 54 / Protective earthing I		
Potential separation	NF-toroidal transformer	NF-toroidal transformer	NF-toroidal transformer		
Testmark	CE	CE	CE		
Over temperature protection	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown	Dynamic power management from 85 ° C from 90 ° C shutdown		
Dimensions	331/372 x 533 x 204 mm	331/372 x 533 x 204 mm	331/372 x 533 x 204 mm		
Weight	22 kg	24 kg	26 kg		

Technical change and errors excepted!

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