



# Charger & Inverter Product Line Introduction

Product Strategy Center [info@meanwell.com](mailto:info@meanwell.com)



# Outline

- Introduction
- Product Category / Selection table / Road Map
- New And Old Generation Comparison
- Key Features of New Generation
- Advantages
- Applications



## Introduction

# What applications need chargers and inverters?

### AC-DC Charger

#### Energy Storage

##### Fixed energy storage

Stores renewable energy in battery banks



#### Battery Charging

##### Mobile device charging

Charges batteries



### DC-AC Inverter

#### Portable Power Source

##### Independent AC Power Source

Outdoor non-grid-tied



#### Power Backup

##### Redundant AC Power Source

Grid-tied UPS backup



# Product Category

## Charger

※ Note 1: Red words are new products

※ Note 2: Please click on series names for related introduction webpages or specifications

Category	Type	Photo	Series	Warranty	Remark
Portable	Desktop type		<a href="#">ENP/ENC series</a> 120/ 180/ 240/ 360W	3 years	Programmable
	Adaptor type		<a href="#">GC series</a> 30/ 120/ 160/ 220/ 330W	2 years	
			<a href="#">PA/PB series</a> 120 / 230W NRND <a href="#">NPB series</a> 120/ 240/ 360W <b>NEW</b>	3 years	2/3 stage and Vo/Io Adj. (NPB-120~360)
Stationary	Screw Mounted		<a href="#">HEP series</a> 600/ 1000W	6 years	1. Programmable 2. Harsh Environment
			<a href="#">RPB-1600 series</a> 1600W <a href="#">DBU-3200 series</a> 3200W	5 years	Programmable
			<a href="#">PB series</a> 300/ 360/ 600/ 1000W NRND <a href="#">NPB/NPP series</a> 450/ 750/ 1200/ 1700W <b>NEW</b>	3 years	NPB : Intelligent/CANBus/ NPP : 2-in-1 (PSU+ Charger)
	Rack-Mounted		<a href="#">RCB-1600 series</a> 1600W <a href="#">DBR-3200 series</a> 3200W	5 years	1. Rack type , hot-swop 2. Programmable

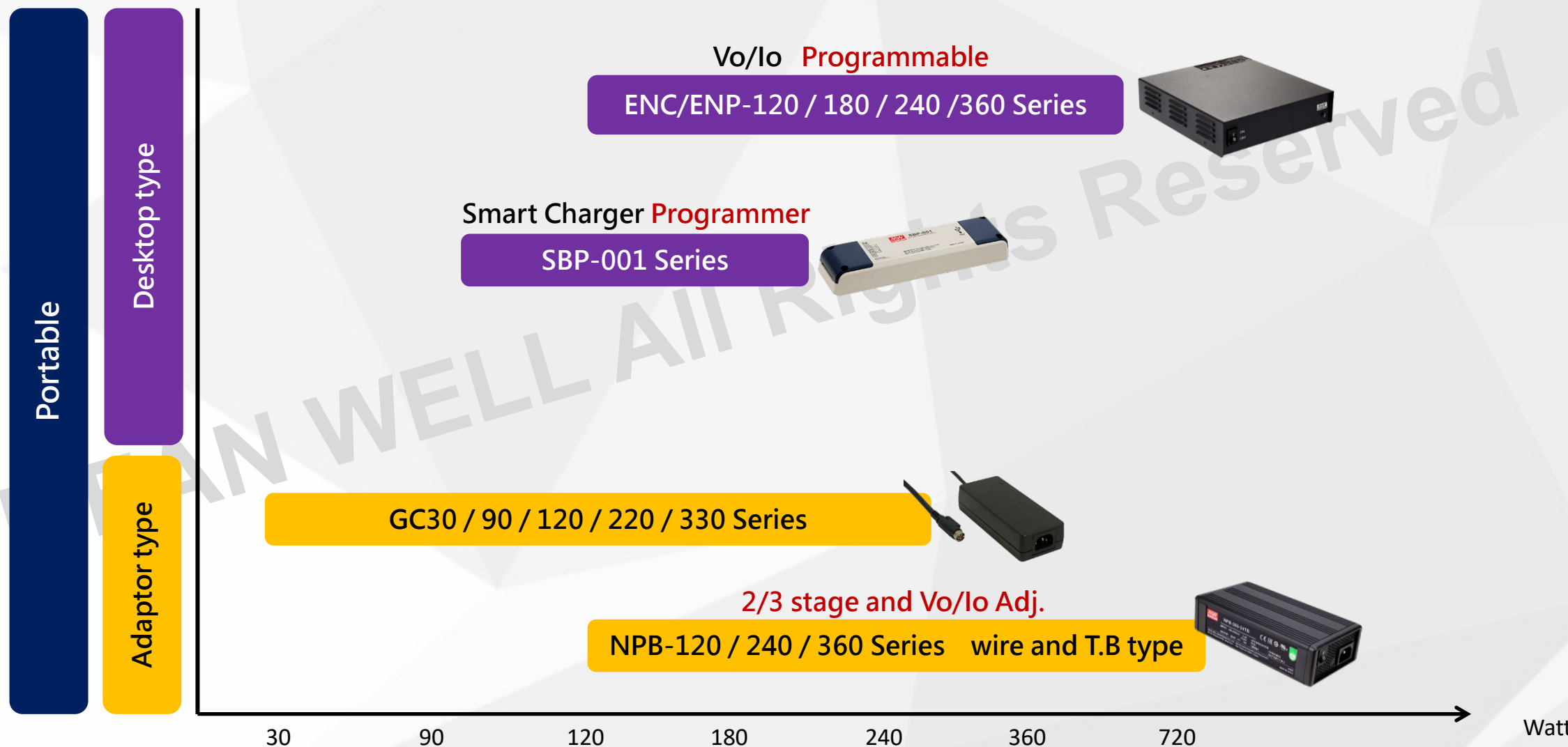


# Selection Table

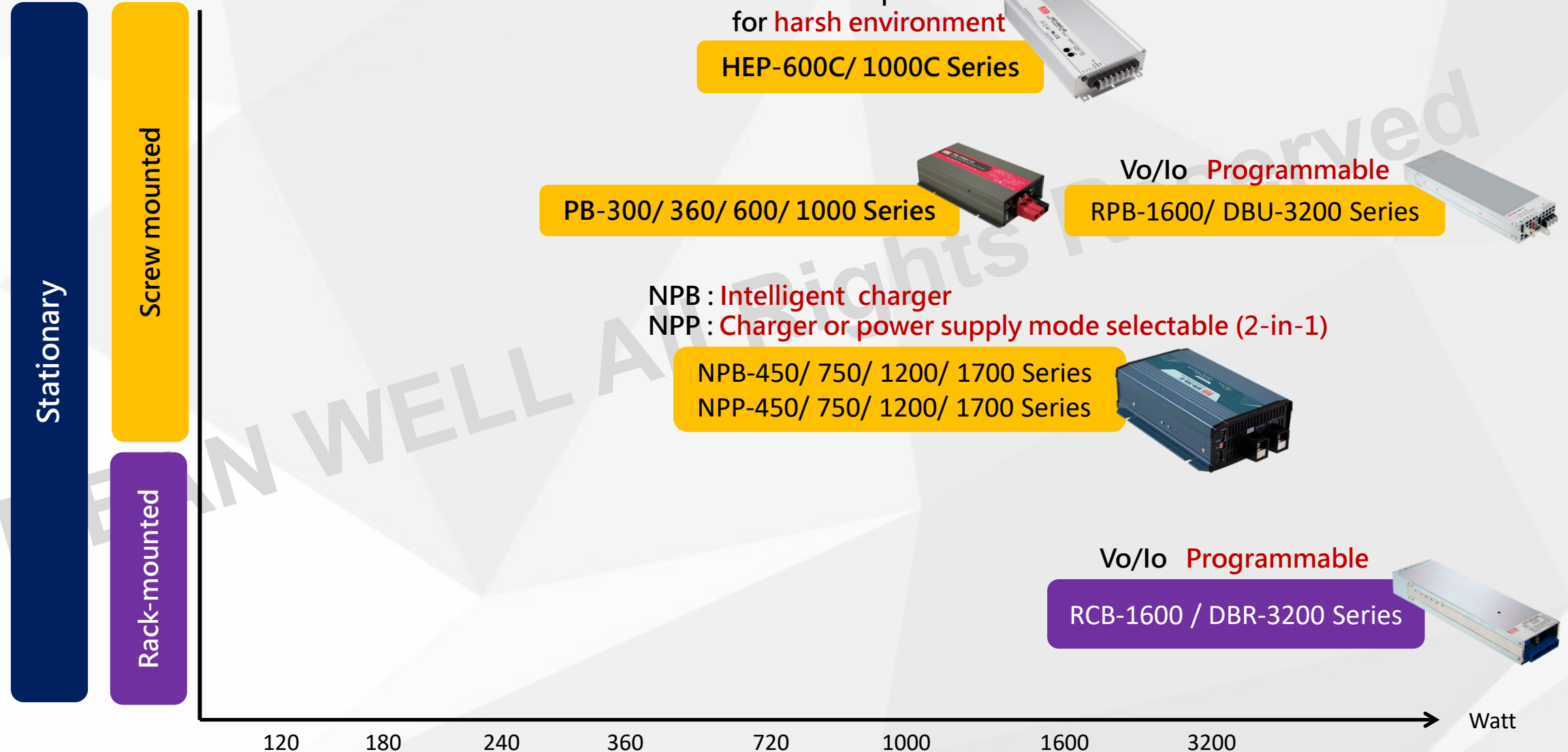
## Charger

Category	Type	Series	Charging Stage	Voltage	Features
Portable	Desktop	ENC/P-120/180/240/360	3	14.4/ 28.8/ 57.6	Charging voltage, charging current and timeout can be programmed through SBP-001
	Adaptor	GC30	2	4.2/ 5.6/ 7.2/ 8.4/ 14.3/ 16.8/ 28.6	Standard DC output plug
		GC120/160/220/330		13.6/ 27.2/ 54.4	
		NPB-120/240/360	2/3	14.4/ 28.8/ 57.6	1. 2 or 3 stage selectable by DIP S.W. on front panel 2. Multiple DC output plugs selectable: Anderson, terminal block and 4 pin power pin
Stationary	Screw Mounted	NPB-450/750/1200/1700	2/3	14.4/ 28.8/ 57.6/ 72	1. Ultra wide charging range auto sensing function 2. Built-in CANbus protocol 3. Charging voltage, charging current and timeout can be programmed through SBP-001
		NPP-450/750/1200/1700	3		Battery Charger & Power Supply 2-in-1
		HEP-600/1000C	3	14.4/ 28.8/ 57.6	1. Fully potted and fanless design with aluminum enclosure, IP67 and withstand 10G vibration test 2. 6 years warranty and suitable for Harsh Environment
		RPB-1600		14.4/ 28.8/ 57.6	1. Charging voltage & current can be adjusted via external 1~5Vdc 2. Built-in I <sup>2</sup> C interface, PMBus protocol (Optional CANBus protocol) 3. Active current sharing up to 25600W
		DBU-3200		28.8/ 57.6	
	Rack-Mounted	RCB-1600	2/3	14.4/ 28.8/ 57.6	1. Support hot swap 2. Charging voltage & current can be adjusted via external 1~5Vdc 3. Built-in I <sup>2</sup> C interface, PMBus protocol (Optional CANBus protocol) 4. Active current sharing up to 25600W
		DBR-3200		28.8/ 57.6	

# Road Map Charger



# Road Map Charger



# New Gen. Charger

## NPB vs NPP Series Difference Description

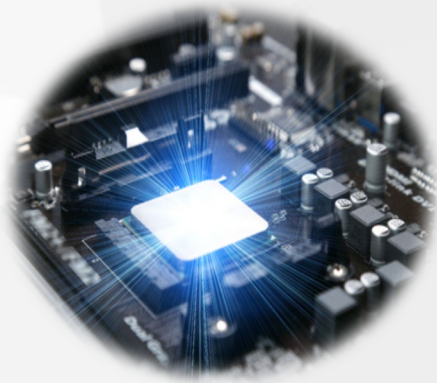


	NPB series							NPP series			
O/P Wattage	120W	240W	360W	450W	750W	1200W	1700W	450W	750W	1200W	1700W
Product Level	Basic Charger			Intelligent Charger				Power supply + Charger 2-in-1			
Auto ranging	✗			✓ ( Patent NO. : CN111711254B )				✗			
Vo Adj.	✓			✗ ( Auto ranging )				✓			
Io Adj.	✓					✓		✓			
Built-in CANBus	✗			✓				✗			
Charging Stage	2 or 3-stage adjustable							3-stage fixed			
Suitable Battery	Lead-acid (Pb) 、 Li-ion							Lead-acid (Pb)			
Price	\$			\$\$\$				\$\$			



# New And Old Generation Comparison

## Key Features for New Generation



### Intelligent & Smart

Auto ranging  
&  
Remote control  
(NPB-450~1700)



### Safety & Durability

Global Safety  
3 years warranty



### High Efficiency

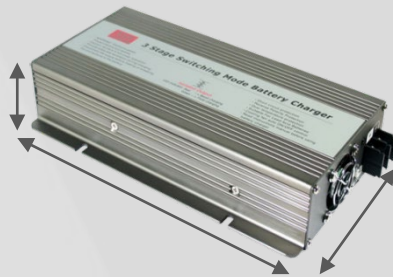
Fast Charging  
&  
High Efficiency  
up to 93%

# New And Old Generation Comparison

## Dimension

### OLD Old Gen.— PB Series

Old Gen.



Series Name	Dimension (LxWxH)
PB-120	180*96*49mm
PB-230	190*96*49mm
PB-300	253*135*48.5mm
PB-360	253*135*48.5mm
PB-600	230*158*67mm
PB-1000	300*184*70mm



### NEW New Gen. — NPB Series

New Gen.



Reduced size(%)



Series Name	Dimension (LxWxH)	Reduced size(%)
NPB-120	180*96*49mm	0%
NPB-240	180*96*49mm	- 5%
NPB-360	180*96*49mm	- 45%
NPB/NPP-450	205*130*55mm	-12%
NPB/NPP-750	230*158*67mm	0%
NPB/NPP-1200	250*158*67mm	-32%
NPB/NPP-1700	300*184*70mm	---






# New And Old Charger Comparison

## Key Features for 120W~360W

Old Gen. — PB-120/230/300/360 Series



New Gen. — NPB-120/240/360 Series

Output Power	120/230/300/360	120/240/360W
Input Voltage	115/230Vac  or 90~264Vac (by series)	90~264Vac
Output Voltage	14.4V (300W only ,Adjustable 13~14.7V) 28.8V (300W only ,Adjustable 26~28.8V) 57.6V (300W only ,Adjustable 52~58.6V)	14.4V ( 10.5~15.2V) 28.8V ( 21~30.4V) 57.6V ( 42~60.8V)
Charging Curve	Only 3 stage	 2 or 3 stage selectable by DIP S.W
Adjustable Vo/Io(VR)	Only 300/360W Vo can be adjusted	 Adjustable Vo / Io
Efficiency	73~87%	86.5~93%
Working Temp.	-10~+60°C	-30~+70°C
Multi-Intelligent Protections	Short circuit/ Over voltage/ Over temp./ Battery reverse polarity	Short circuit/ Over voltage/ Over temp./ Battery reverse polarity/ Battery static discharge protection
Output Connector	XLR / AD1 / TB (by series)	 XLR / AD1 / TB 3 types are all standard products
Applicable Battery	lead-acid	 lead-acid or li-ion batteries
Safety Approvals	62368-1 or 60335-2-29 (by series)	62368-1 + 60335-2-29 dual Certification
Warranty	2 or 3 years (by series)	3 years

# Key Features of New Charger

## More Flexible · More Simple

Old Gen. -PB-120/230 Series

No Io / Vo adjustable functions



New Gen. -NPB-120/240/360 Series

### Functions

Charging stage Adj	Io Adj	Vo Adj
2 or 3 stage Adj. by DIP S.W	50~100% rated current adjustable by VR	14.4V(10.5~15.2V) 28.8V(21~30.4V) 57.6V(42~60.8V) by VR



(NPB-360-xxTB sample photo)



# Key Features of New Charger

## Complete Output Connectors

Old Gen. — PB-120/230 Series



PB-120



PB-230



New Gen. — NPB-120/240/360 Series



3 types are all standard products
















# New And Old Generation Comparison

## Key Features for 360W~1700W

### Old Gen. — PB-360/600/1000 Series

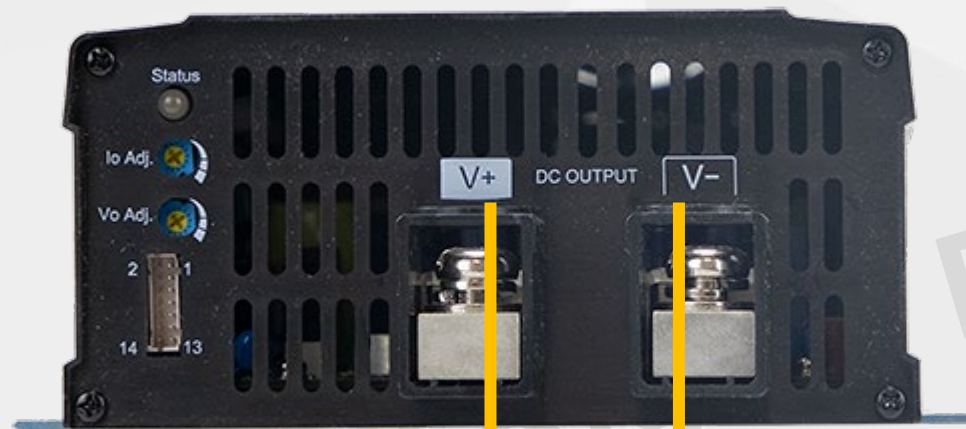


### New Gen. — NPB-450/750/1200/1700 Series

Output power	300/ 360/ 600/ 1000W		450/ 750/ 1200/ 1700W
Input voltage	115/230Vac  or 90~264Vac (by series)		90~264Vac
Output voltage	14.4V (stationary voltage) 28.8V (stationary voltage) 57.6V (stationary voltage)		14.4V (10.5~21V) 28.8V (21~42V) 57.6V (42~80V) 72V (54~100V, 450W only) NPB:  (Patent No.: CN111711254B)
Patented Auto ranging			NPP: 
Adjustable charging	300W/ 360W only		NPB:  adjustable between 50~100% via VR on front panel or connect with PC NPP:  Vo/Io adjustable via VR on front panel
Communication interface			NPB:  (built-in) NPP: 
Charging stage	300/360W: 3 stage, 600/1000W: 2/3/8 stage		2 or 3 stage selectable by DIP S.W or connect with computer
Other function	Floating maintenance, NTC sensing, RC		Floating maintenance, NTC sensing, RC
Efficiency	85~89%		91~93%
Operating temp.	-10~+60°C		-30~+70°C
Multi-intelligent protections	Short circuit/ Overvoltage/ Over temp./ Battery reverse polarity		Short circuit/ Overvoltage/ Over temp./ Battery reverse polarity Battery static discharge protection
Applicable battery	Lead-acid battery		Lead-acid or li-ion batteries
Safety approvals	62368-1 或 60335-2-29 (by series)		62368-1 + 60335-2-29 dual certification

## Key Features of New Charger (NPB-450~1700 Series)

# Auto Ranging Charging with Multiple Functions



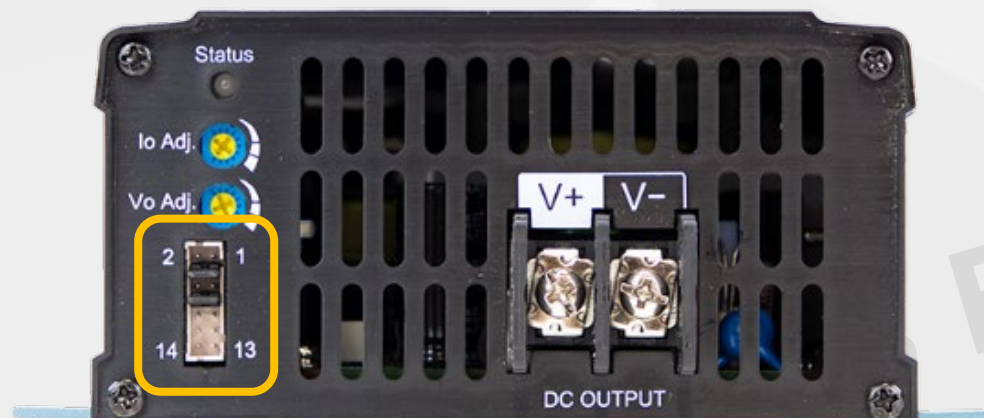
**10.5V**  
**21V**  
**42V**  
**54V**

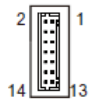
Ultra-wide charging voltage,  
and can be used for a wide range of batteries

**21V**  
**42V**  
**80V**  
**100V**

# Key Features of New Charger ( NPB-450~1700 Series)

## Built-in CANBus Protocol Interface



Smart programmable with SBP-001 & Digital communication													
	1	2	3	4	5	6	7	8	9,10	11	12	13	14
	CAN Bus address A1	CAN Bus address A0	Prog +3.3V	CAN Bus address GND	BAT OK	Charger OK	R.C ON/OFF	+12Vaux	GND-AUX	CANH	CANL	NTC+	NTC-

With CANBus protocol, control and monitoring function can be realized. It is helpful when users intend to modify the parameters remotely. Users can access the master and modify the parameters through CANBus, which include ON/OFF, output voltage/ current, temperature. More to that, users can even change the charging curve parameters, such as constant current level, boost voltage, float voltage and timeout function.

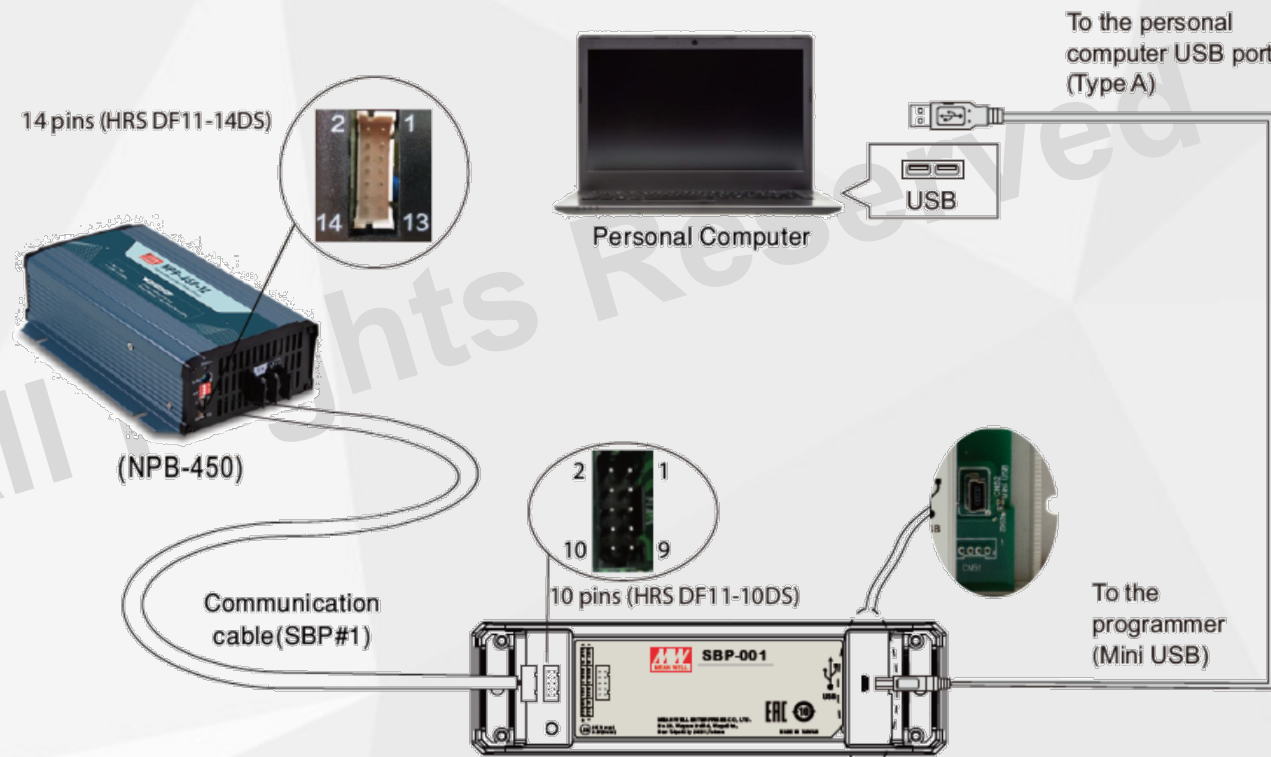


## Key Features of New Charger (NPB-450~1700 Series)

# Programmable Charging Setting: Connection

### Smart Programmer SBP-001

Charger can be quickly connected with USB to the laptop



**Programmer SBP-001 is able to work with:**

ENC-120/240/360 、 HEP-1000C / 2300-55 、 RCB/RPB-1600 、 DBU/DBR-3200 、 DRS-240/480 、 NPB-450/750/1200/1700

# Key Features of New Charger (NPB-450~1700 Series)

## Programmable Charging Setting: Function Introduction

SBP-001 compatible series: ENC-120/240/360 , RCB/RPB-1600 , DBU/DBR-3200 , HEP-1000C / 2300-55 ,  
DRS-240/480 , NPB-450/750/1200/1700

Flexibly adjust  
charging  
parameters

Selectable  
charging curves

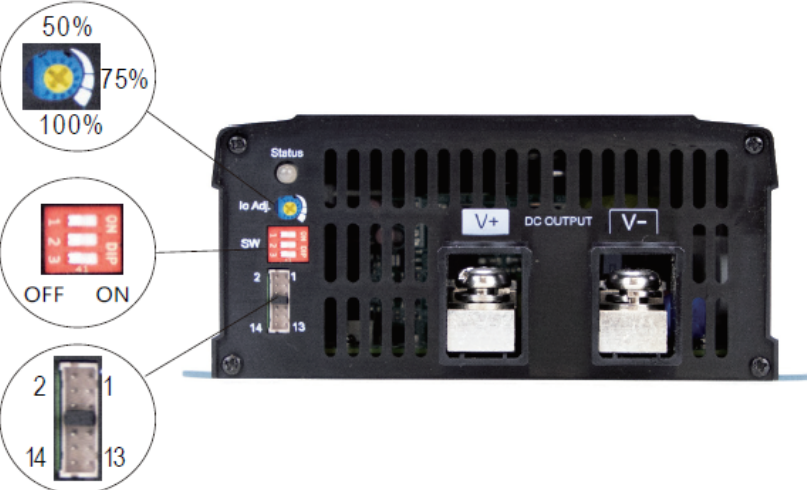


Charging time  
setting

# Key Features of New Charger (NPB-450~1700 Series)

## Simple Operation Interface

Functions



Io Adj. by VR									
	Can adjustable 50~100% output current by VR								

2 or 3-stage & charging curve selectable by DIP S.W												
1 2 3 OFF ON	1	2	3	Description	Vboost				Vfloat			
					12V	24V	48V	72V	12V	24V	48V	72V
	OFF: 3 stage (Default)	OFF	OFF	Default, programmable	14.4V	28.8V	57.6V	72V	13.8V	27.6V	55.2V	69V
	ON: 2 stage	ON	OFF	Pre-defined, Gel battery	14.0V	28.0V	56.0V	70V	13.6V	27.2V	54.4V	68V
		OFF	ON	Pre-defined, flooded battery	14.2V	28.4V	56.8V	71V	13.4V	26.8V	53.6V	67V
		ON	ON	Pre-defined, AGM battery, LiFe04	14.6V	29.2V	58.4V	73V	14.0V	28.0V	56.0V	70V

Smart programmable with SBP-001 & Digital communication													
2 14 1 13	1	2	3	4	5	6	7	8	9,10	11	12	13	14
	CAN Bus address A1	CAN Bus address A0	Prog +3.3V	CAN Bus address GND	BAT OK	Charger OK	R.C ON/OFF	+12Vaux	GND-AUX	CANH	CANL	NTC+	NTC-

## New 2-in-1 Charger: NPP Series (NPP-450~1700 Series)

# Key Features

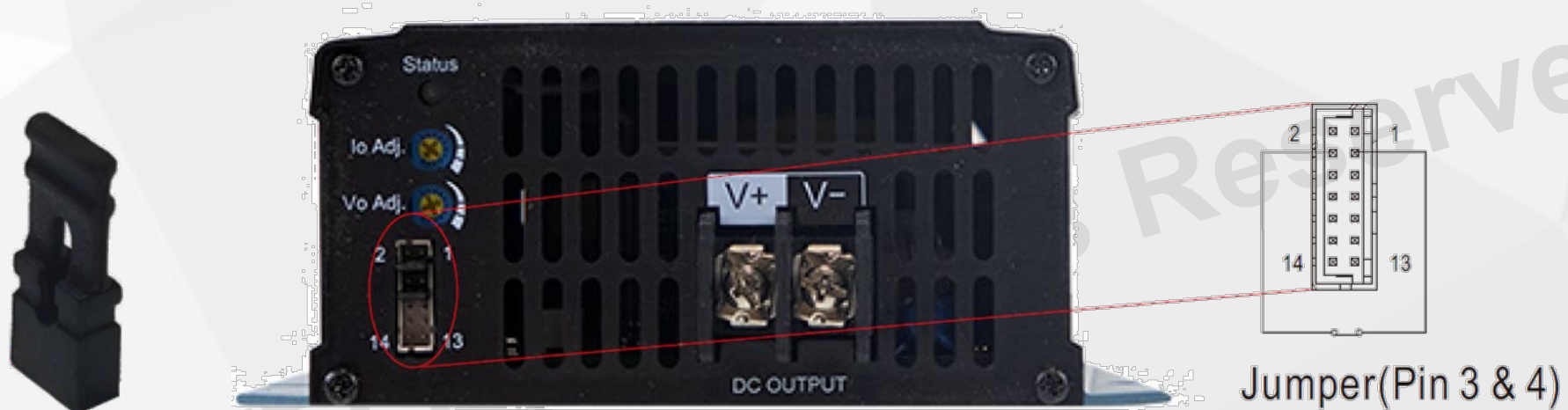
- Battery charger and power supply 2-in-1
- Ultra-wide charging voltage  
(10.5~21V, 21~42V, 42~80V, 54~100V)
- Charging current & voltage adjustable through panel
- 3 stage charging (only under charging situation)
- -30~+70°C wide operating temperature
- Thermal controlled DC fan for noise reduction
- Multi-intelligent protections: Short circuit / Overload / Over voltage/ Over temp.
- Suitable for lead-acid batteries
- Carry handle accessory available (Order No.: DS-Carry handle)
- Safety approval: CB, UL, DEKRA, EAC, CE, UKCA (62368-1 + 60335-1/-2-29)
- 3 years warranty





## New 2-in-1 Charger: NPP Series (NPP-450~1700 Series)

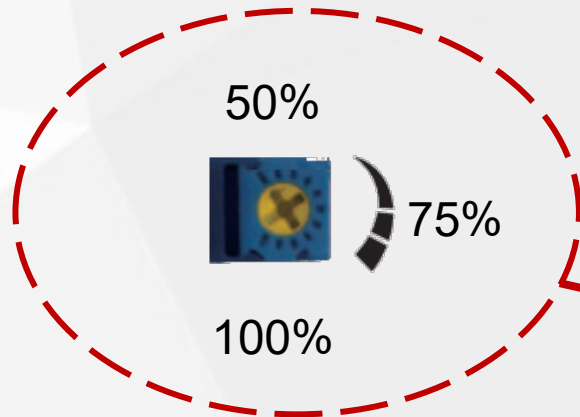
# Flexibly Switch Charger $\rightleftharpoons$ Power Supply



Charging Mode (default)	Pin 3 & 4 no plugged
Power Supply	Pin 3 & 4 plugged in

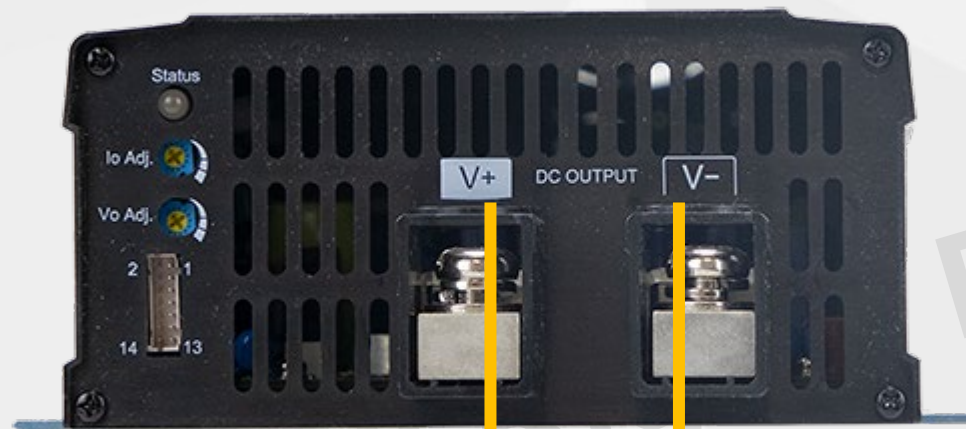
# New 2-in-1 Charger: NPP Series (NPP-450~1700 Series)

## Adjustable Output Voltage & Current



# New 2-in-1 Charger: NPP Series (NPP-450~1700 Series)

## Ultra-wide charging voltage



**10.5V**  
**21V**  
**42V**  
**54V**

Ultra-wide charging voltage ,  
and can be used for a wide range of batteries

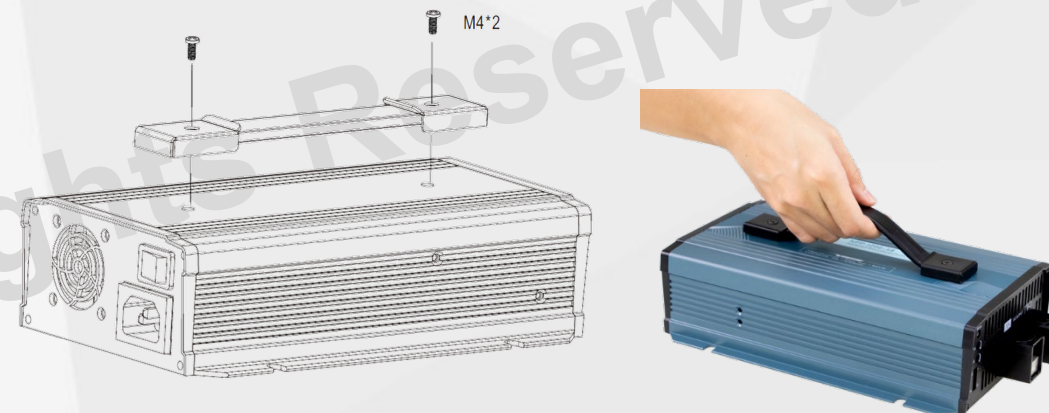
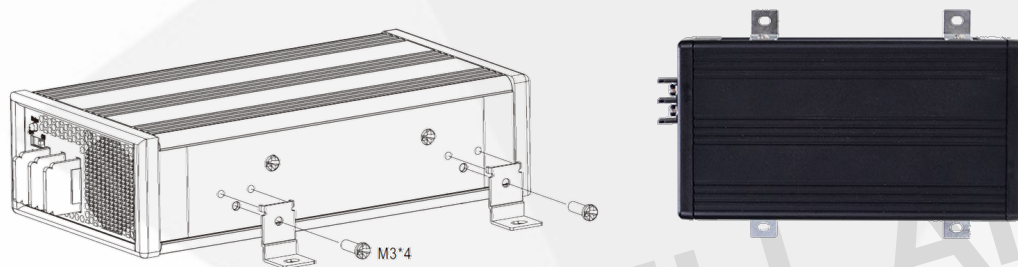
**21V**  
**42V**  
**80V**  
**100V**

# New Generation Charger and Inverter Features Introduction

## Bracket And Carry Handel




NPB-120/240/360 series

NPB/NPP-450/ 750/ 1200/ 1700 series  
NTS-300/ 450/ 750/ 1200/ 1700/ 2200/ 3200 series  
NTU-1200/ 1700/ 2200/ 3200 series



※ Bracket (Optional accessory, Should ordered seperately)

MW's Order No.	Item	Quantity
DGG2MHS012D		4pcs/per model

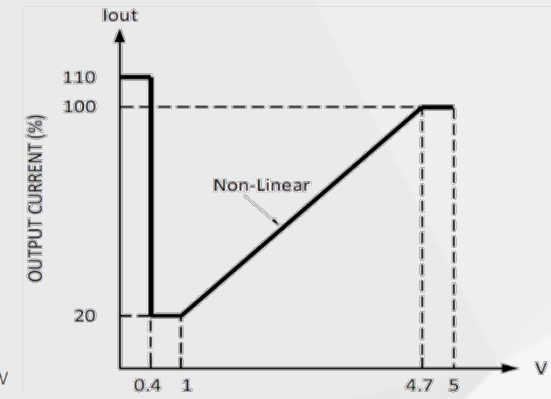
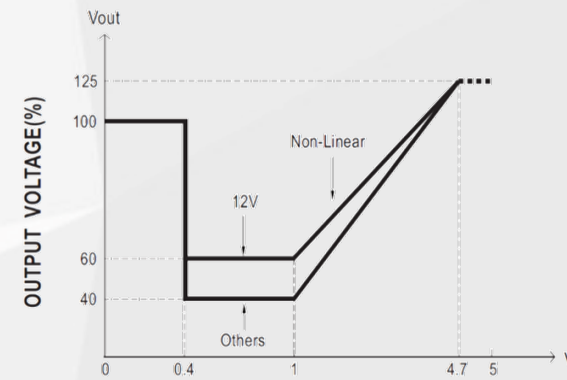
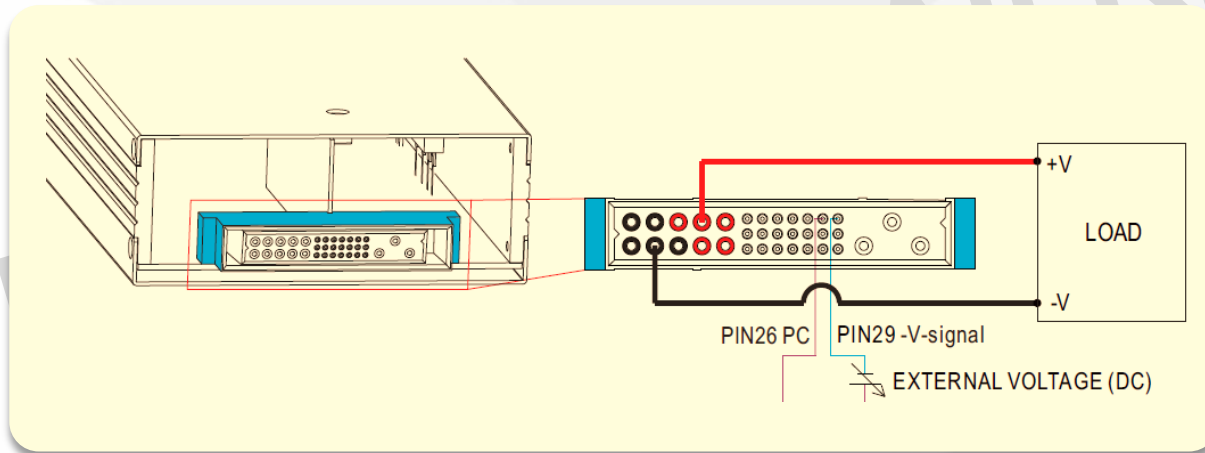
MW's Order No.	Item		Quantity
DS-Carry Handle	①	Handle 	1
	②	Foot pad 	4
	③	Screw 	2

# Stationary Charger: RCB/RPB/DBU/DBR/HEP Series

## P.V/P.C Functions, Multiple Usages

Series with Programmable Voltage / Programmable Current functions:  
RCB/RPB-1600, DBU/DBR-3200, HEP-1000C

Flexibly adjust output voltage or constant current level via external 0-5Vdc voltage signal





# Key Features of New Charger For A Variety of Batteries

## Lead-acid Batteries

13.8V, 27.6V, 55.2V

- Wet Cells
- Gel Cells
- AGM



## Lithium-ion Batteries

14.4V, 28.8V, 57.6V, 67.2V,  
72V, 84V, 96V, 120V

- Ternary lithium
- Lithium-ion manganese oxide (LiMn2O4)
- Lithium iron phosphate (LiFePO4)






# Product Category

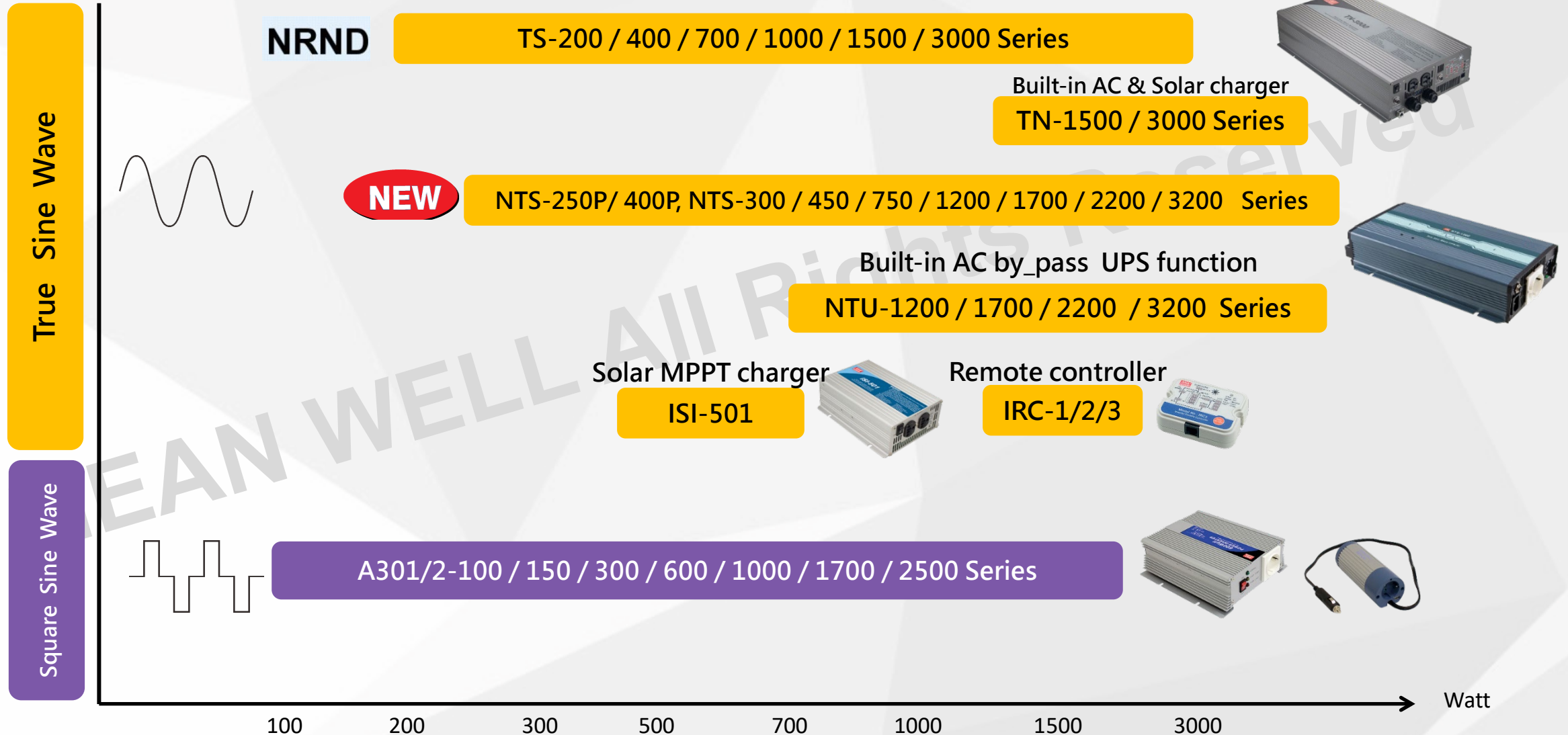
## Inverter

※ Note 1: Red words are new products

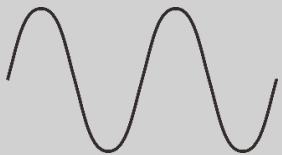
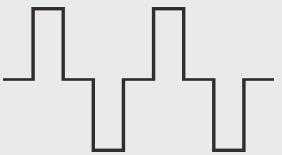
※ Note 2: Please click on series names for related introduction webpages or specifications

Category	Photo	Series	Warranty
True sine wave	 <b>NRND</b>	<a href="#">TS series</a> DC-AC 200/ 400/ 700/ 1000/ 1500/ 3000W  <a href="#">TN series</a> DC-AC + Charger + AC_by pass(UPS) 1500/ 3000W	3 years
	 <b>NEW</b>	<a href="#">NTS series</a> DC-AC 250/ 300/ 400/ 450/ 750/ 1200/ 1700/ 2200/ 3200W  <a href="#">NTU series</a> DC-AC + AC_by pass (UPS) 1200/ 1700/ 2200/ 3200W	
Square sine wave		<a href="#">A301/A302 series</a> DC-AC 100/ 150/ 300/ 600/ 1000/ 1700/ 2500W	1 year

# Road Map Inverter



## Old Generation Inverter

	Series	Output Power	DC Input Voltage	AC Output Voltage	Dimension (LxWxH)
<b>True Sine Wave</b> 	TS-200	200W	12Vdc 24Vdc 48Vdc	100/110/115/120Vac 200/220/230/240Vac (Adjustable output by setting bottom)	205*158*59mm
	TS-400	400W			205*157*67mm
	TS-700	700W			295*184*70mm
	TS-1000	1000W			345*184*70mm
	TS-1500	1500W			420*220*88mm
	TN-1500	1500W			420*220*88mm
	TN/TS-3000	3000W			466*283*100mm
<b>Modified Sine Wave</b> 	A30x-100	100W	12Vdc 24Vdc	110Vac 230Vac (Output Voltage not adjustable)	170*65Ømm
	A30x-150	150W			165*94*69mm
	A30x-300	300W			165*88*74mm
	A30x-600	600W			210*173*65mm
	A30x-1K0	1000W			320*210*85mm
	A30x-1k7	1500W			455*210*85mm
	A30x-2k5	2500W			430*210*159mm

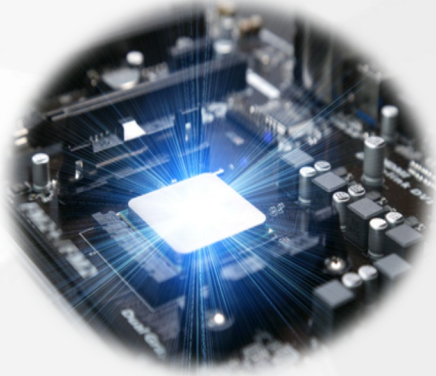
## New Generation Inverter

Installation Type	Series	Output Power	DC Input Voltage	AC Output Voltage	Built-in Fan	UPS	Dimension (LxWxH)	
Built-in type (PCB type)	NTS-250P	250W	10 ~ 16.5Vdc 20 ~ 33Vdc 40 ~ 66Vdc	100/110/115/120Vac 200/220/230/240Vac (Adjustable output by DIP SW)	✗	✗	186*100.5*32mm	
	NTS-400P	450W					186*100.5*32mm	
External type	NTS-300	300W			✓		✗	210*130*55mm
	NTS-450	450W						210*130*55mm
	NTS-750	750W						270*158*67mm
	NTS-1200	1200W						345*184*67mm
	NTS-1700	1700W						400*184*67mm
	NTS-2200	2200W						400*270*98mm
	NTS-3200	3200W						440*270*98mm
	NTU-1200	1200W			✓	✓		345*184*67mm
	NTU-1700	1700W						400*184*67mm
	NTU-2200	2200W					400*270*98mm	
	NTU-3200	3200W					440*270*98mm	



## New And Old Generation Comparison

# 3 Key Features of New Inverter



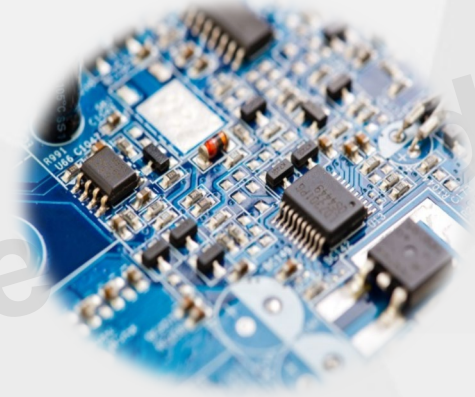
## Safe

- Multiple Protections
- Global Certifications



## Easy to Use

- Friendly Interface
- Intelligent Remote Control



## Durable

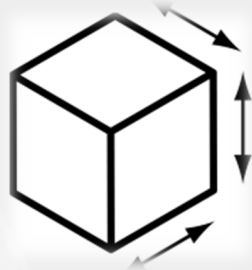
- Selected Components
- 3 Years Warranty

# New And Old Generation Comparison

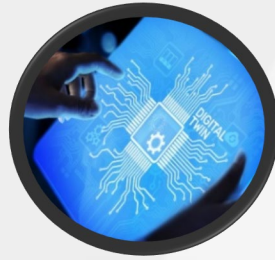
## 6 Optimizations of New Inverter



Packaging  
Upgrade



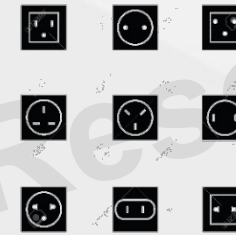
Size  
Miniaturization



Specification  
Upgrade



User  
Friendly



Support  
Variety of  
Sockets



Affordable  
Price

# Key Features of New Generation Eco Friendly Packaging

## Old Gen. — TS Series



Polyethylene(EPE)



Ink (toluene, xylene)



## New Gen . — NTS/NTU Series



Paper Pulp



Ink free

# New And Old Generation Comparison

## Dimension

### Old Gen. — TS Series

Old Gen.



Series	Dimension (LxWxH)
NA	NA
TS-200	205*158*59mm
TS-400	205*158*67mm
TS-700	295*184*70mm
TS-1000	345*184*70mm
TS-1500	420*220*88mm
NA	NA
TS-3000	466.8*283.5*100mm



### New Gen. — NTS/NTU Series



New Gen.



Reduced size  
(%)

Series	Dimension (LxWxH)	
NTS-250P/400P	186*100.5*32 mm (Slim)	NA
NTS-300	210*130*55mm	-21%
NTS-450	210*130*55mm	-31%
NTS-750	270*158*67mm	-25%
NTS/NTU-1200	333*184*70mm	0%
NTS/NTU-1700	400*184*70mm	-37%
NTS/NTU-2200	400*270*98mm	NA
NTS/NTU-3200	440*270*98mm	-12%



# New Inverter — NTS/NTU Series

## Easy to use, friendly interface

Old Gen. –TS series



New Gen.-NTS/NTU series



彈性		節能	
可自調AC電壓		可自調頻率	可選ECO節能模式
SW1	SW2	SW3	SW4
OFF	OFF : 100Vac or 200Vac	ON : 50Hz	ON : Saving mode
OFF	ON : 110Vac or 220Vac		
ON	OFF : 115Vac or 230Vac	OFF: 60Hz	OFF: Non-Saving mode
ON	ON : 120Vac or 240Va		



# New Inverter — NTS/NTU Series

## Variety of Sockets

Old Gen. -TS series



US



EU



New Gen.-NTS/NTU series



US



EU



China



Universal

# New And Old Generation Comparison

## Key Features

### Old Gen.-TS Series



### New Gen.-NTS/NTU Series



**Built-in type: 250/400W**  
Stand-alone type:  
**300/ 450/ 750/ 1200/ 1700/ 2200/ 3200W**



**10~16.5Vdc**  
**20~33Vdc**  
**40~66Vdc**



**1.2~1.5W** (NTS series, by model)  
**8~15W** (NTU series, by model)

**89~93%**

**-25~+70°C**



**250~3200W whole product family**








Input: Reverse polarity/ DC low alarm/ Over voltage/  
**Battery over discharge**  
Output : Short circuit/ Overload/ Over temp.



**✓** (250W/400W Built-in, Optional for other models)



**✓** (NTU Series only)

Output Power	Built-in type: N/A Standalone: 200/ 400/ 700/ 1000/ 1500/ 3000W
Output Voltage	10.5~ 15Vdc 21 ~ 30Vdc 42 ~ 60Vdc
No-load power consumption	6~15W (by model) In power saving mode
Efficiency	84.5~92%
Working Temp.	0~+60°C
R.C 	only 200/400W
Multi-intelligent protections	Input: Reverse polarity/ DC low alarm/ Over voltage Output : Short circuit/ Overload/ Over temp.
Communication	NA
UPS	NA
Safety Approvals	     

(for 112/124 type F only)

CB  
IEC62368-1

DEKRA

UL US  
UL458  
(for 112/124 type GFCI only)

E13

EAC

AS/NZS 62368-1

TPTC004

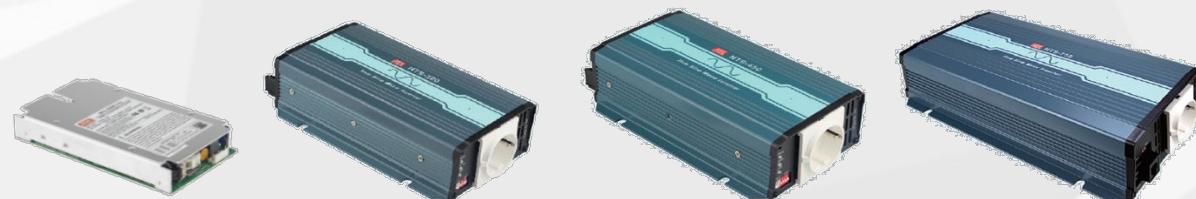
FC

CE

# New Inverter : NTS Series

## Key Features

- Product Family: NTS-250P / 400P/ 300/ 450/ 750/ 1200/ 1700/ 2200/ 3200
- **Independent portable DC→AC intelligent inverter** -12/24/48Vdc to 110Vac or 230Vac
- Pure sine wave inverter (**THD < 3%**)
- Design with new digital chip; the series has the features of **intelligent monitoring, high efficiency, energy saving, compact size and lightweight**
- **Selectable AC output frequency:** 100/ 110/ 115/ 120Vac or 200/ 220/ 230/ 240Vac, 50HZ or 60HZ
- Built-in **ECO saving mode**, and No-load power consumption **< 1.2W~1.7W** max. (by model)
- Built-in intelligent temperature control cooling fan
- **Multi-intelligent protections** (Automatic shutdown when abnormal) :  
DC input- Reverse polarity/ Bat. low alarm/ Bat. low shutdown/ Over voltage  
AC output - Short circuit/ Overload/ Over temp.
- **-25~+70°C** wide working temperature
- **Support RS-232 protocol interface**, and can be integrated with system
- Comply with international certification ,safety is guaranteed
- Suitable for lead-acid or li-ion batteries
- 3 years warranty

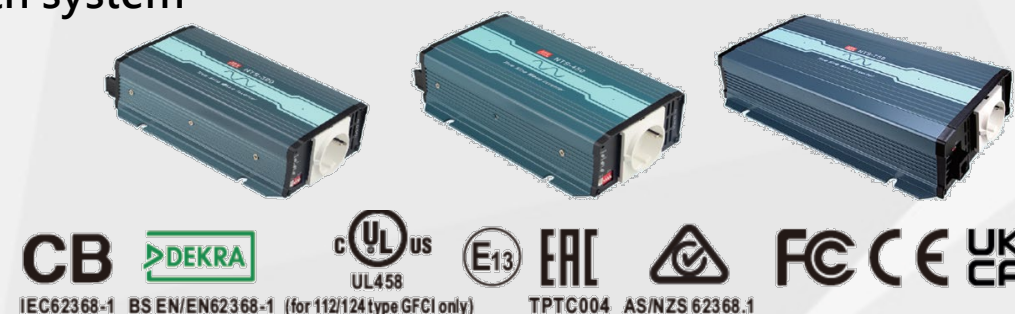


NTS-P



# Key Features

- Product Family: NTU-1200/ 1700/ 2200/ 3200
- Independent portable DC→AC intelligent inverter -12/24/48Vdc to 110Vac or 230Vac
- **Built-in UPS function**, and it allows AC mains to directly provide the energy to load (**NTU = NTS + UPS**)
- DC-AC pure sine wave inverter (THD<3%)
- **Selectable AC output frequency** : 100/ 110/ 115/ 120Vac, 200/ 220/ 230/ 240Vac, 50HZ or 60HZ
- No-load power consumption < 8W~10W max. in power saving mode
- Built-in intelligent temperature control cooling fan
- Complete intelligent protections:  
DC input— Reverse polarity/ Bat. low alarm/ Bat. low shutdown/ Over voltage  
AC output— Short circuit/ Overload/ Over temp.
- -25~+70°C wide working temperature
- Support RS-232 protocol interface, and can be integrated with system
- Comply with international certification, safety is guaranteed
- Suitable for lead-acid or li-ion batteries
- 3 years warranty





## New Inverter Introduction

# Intelligent · Flexible · Saving Energy

AC Output Voltage、 Frequency、 Power saving mode selectable by DIP SW

SW1	SW2	SW3	SW4
OFF	OFF : 100Vac or 200Vac	ON : 50Hz	ON : Saving mode
OFF	ON : 110Vac or 220Vac		
ON	OFF : 115Vac or 230Vac	OFF: 60Hz	OFF: Non-Saving mode
ON	ON : 120Vac or 240Vac		

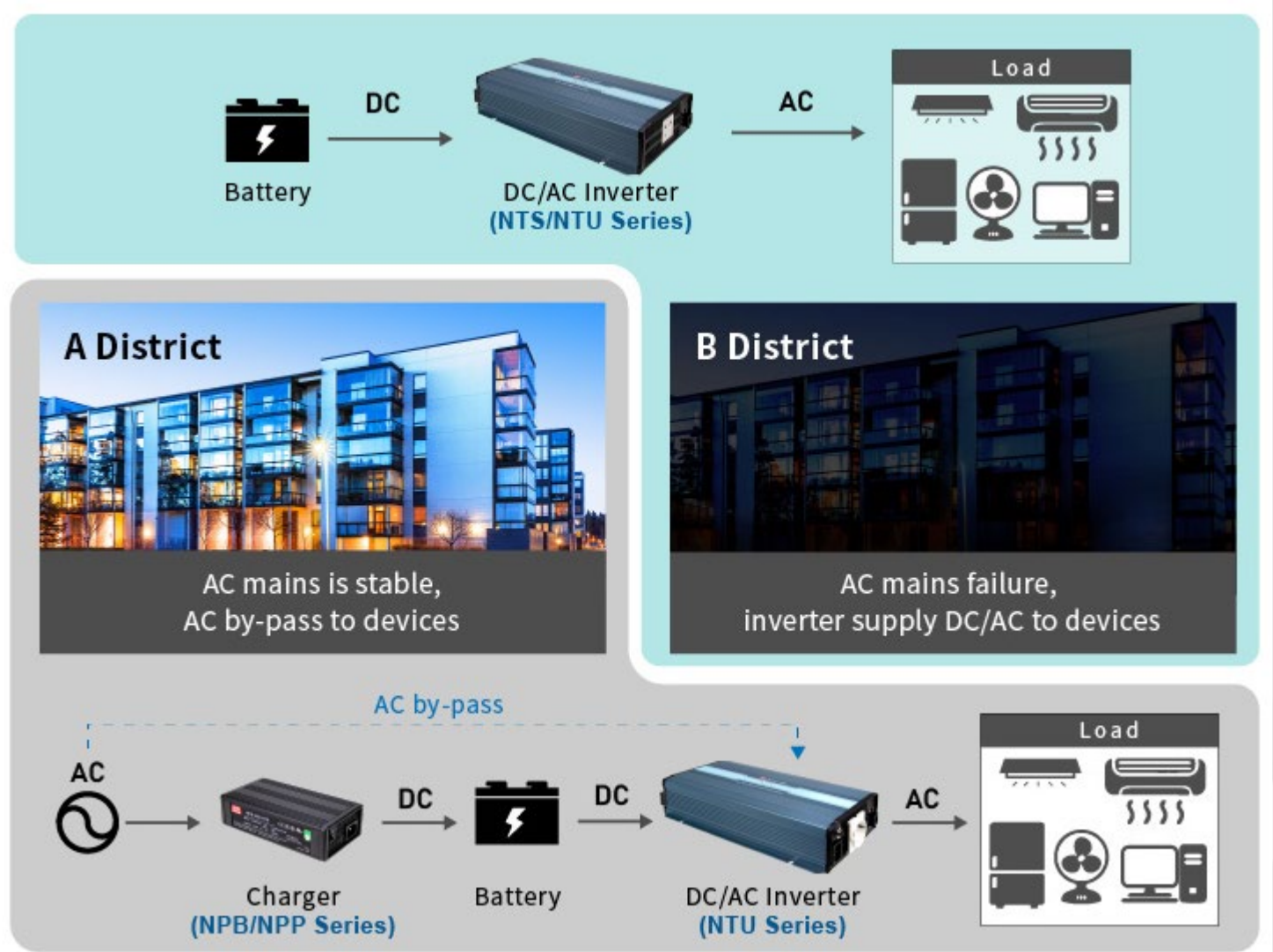




# Built-in UPS Function

- AC grid is normal :  
AC by-pass  
Inverter to supply power

- **AC power failure** :  
Inverter DC→AC to supply  
power



# Complete Intelligent Protection



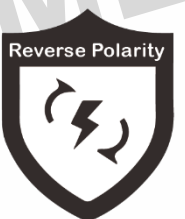
## DC Input Over Voltage Protection

When the DC input voltage is too high, the inverter will automatically shut down.



## DC Input Battery Low Protection

When the DC input voltage is too low, the inverter will automatically shut down to avoid reducing the battery life.



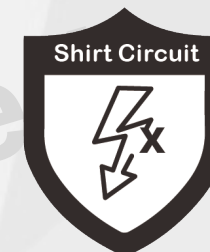
## DC Input Reverse Polarity Protection

When the DC input polarity is accidentally reversed, the internal fuse of the inverter will be disconnected.



## AC Output Short Circuit Protection

When the AC output is accidentally short-circuited, the inverter will automatically shut down.



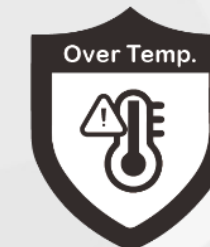
## AC Output Overload Protection

When the wattage of the equipment exceeds the load of the inverter, it will automatically shut down.



## AC Output Over Temperature Protection

When the internal temperature of the inverter is overheated, it will automatically shut down.



# Advantages

## Good Brand Awareness

- Global well-known brand
- Transparent product information
- Complete marketing campaign/team
- Your reliable power partner

## Complete Channel Service

- Global sales channel
- Global after-sales service
- Standard product in stock

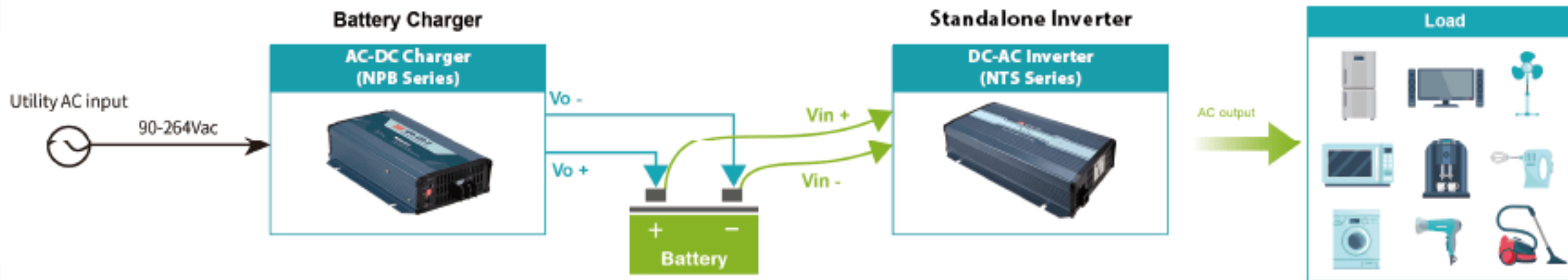
## Complete Product Line

- Inverter:  
Modified sine wave:  
100~2500W  
Pure sine wave:  
200~3200W
- Charger:  
30~3200W

## Safe and Reliable

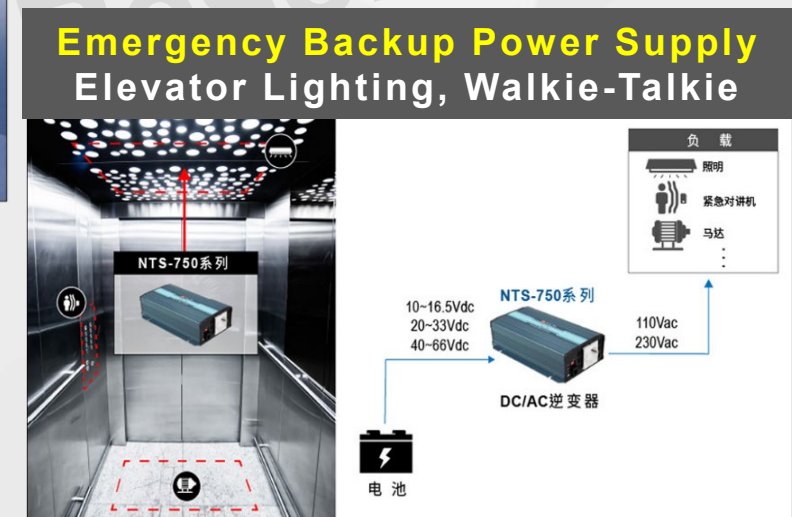
- Safety certified to ensure safe operation
- Strict material selection, reliable operation

# Charger and Inverter Paired Operation



# Application

## NTS Series





# Application

## NTU Series

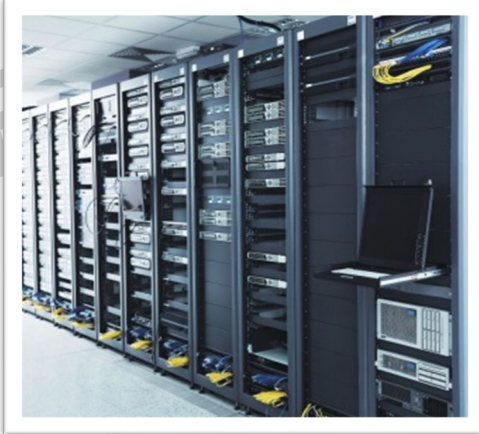
### Fire Facilities Backup



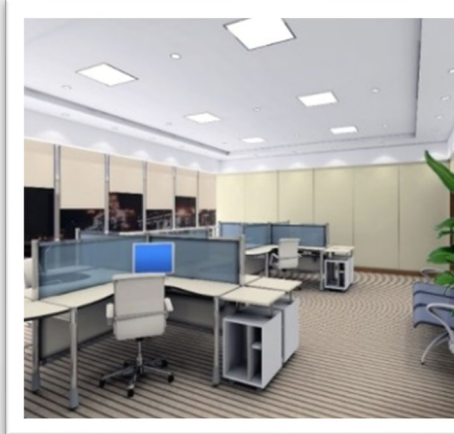
### Communication System Backup



### Data Center Backup



### Office Power Outage Backup



# AC/DC Charger & DC/AC Inverter Applications



## Electric Vehicles

- EV / scooters
- Golf cart
- Skateboards
- Unicycle
- AGV



## Rechargeable Power Tools

- Handheld drill
- Lawn mower
- Tapping machine
- Electric screwdriver
- Blender



## Non-grid-tied Power Source

- Detached house  
(Appliances, lighting...)
- Vehicle  
(RV, ambulance, service vehicle...)
- Boat  
(Air conditioner, TV...)
- Medical cart  
(Monitor, AC outlet...)



## Utility Power Backup

- Factory UPS
- Office UPS
- Household UPS
- Security/Fire alarm system

# WHY MEAN WELL

P

## Products



More than 10,000 models, continues to introduce 10% new models and EOL 5% every year

Q

## Quality



High reliability and quality indicator  
Post-sales failure rate decreases by 10% each year

C

## Cost



High cost-performance products, stable material price, complete supply chain integration

D

## Delivery



24-hour delivery for small amount order.  
14-day delivery for frequent purchase standard products.

S

## Service



MEAN WELL Group and distributors provide services 24 hours a day, and commit to reply within 24 hours

R

## Reliable Relationship



75% of revenue come from long-term distributors and customers