

Product Selection Guide

2024



3rd generation
chip solution



3-year quality
assurance








3rd generation
manufacturing
process

AMCHARD

Amchard focus on high-quality power supply manufacturing and developing for many years. Providing customers with highly reliable and convenient power products and application solutions to drive the transformation and growth of various industries towards intelligence and digitization, empowering customers. Its market-leading industrial power supply product ranges include AC DC/DC DC converter, AC DC enclosed switching power supply, IGBT and LED driver. These advanced industrial power solutions are widely used in industrial, medical, telecoms, and various emerging fields such as new energy, EV charging, photovoltaic, smart home ,railway, telecommunication, security, instrumentation and other fields.

With our best quality and best price, our goal is to become your most reliable power supply partner.

 <p>6000</p> <p>Production area(m²)</p>	 <p>800000</p> <p>Production capability(pcs/month)</p>	 <p>2</p> <p>R&D Center (Dongguan & Zhuhai)</p>	 <p>15+</p> <p>R&D Engineers</p>	 <p>150+</p> <p>Employees</p>
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Product Performance

80 PPM DC
200PPM AC

Defective rate

3500 Khour

Average product line

Fast delivery

27 Aspects

Harsh test

300%

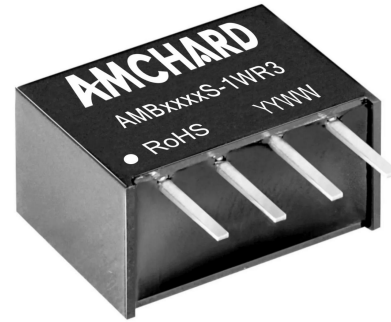
Product performance test

356 Term

Product evaluation

1~2 W DC/DC Fixed input unregulated output

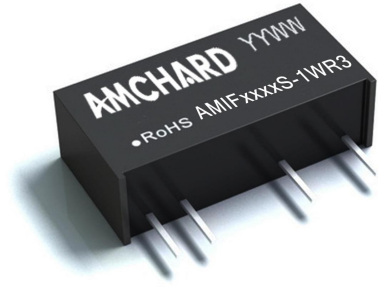
- ◆ Sustainable short-circuit protection
- ◆ Wide working temperature range: -40 °C to +85 °C
- ◆ Up to 88% efficiency
- ◆ The no-load current is as low as 5mA
- ◆ Ripple as low as 20mVp-p
- ◆ Double & Single output
- ◆ Multiple package: DIP, SIP, SMD
- ◆ Isolation voltage: 1500/3000/6000VDC
- ◆ Compliance with EN62368 standards



Amchard PN	Power	Input Voltage Range(VDC)	OutputVoltage (VDC)	Isolation	Package
AMA_D-1WR3	1W	12,15,24	±5,±9,±12,±15,±24	1500VDC	14-DIP
AMA_D-2WR3	2W	5,12,15,24	±3.3,±5,±7,±9,±12,±15,±24	1500VDC	14-DIP
AMA_S-1WR3	1W	3.3,5,9,12,15,24	±3.3,±5,±9,±12,±15,±24	1500VDC	6-SIP
AMA_S-2WR3	2W	5,12,15,24	±3.3,±5,±7.2,±9,±12,±15,±24	1500VDC	6-SIP
AMA_XT-1WR3	1W	3.3,5,12,15,24	±3.3,±5,±9,±12,±15,±24	1500VDC	SMD10
AMB_S-1WR3	1W	3.3,5,12,15,24	3.3,5,9,12,15,24	1500VDC	4-SIP
AMB_D-1WR3	1W	3.3,12,15,24	3.3,5,9,12,15,24	1500VDC	7-DIP
AMB_D-2WR3	2W	3.3,5,9,12,15,24	3.3,5,9,12,15,24	1500VDC	14-DIP
AMB_LS-1WR3	1W	3.3,5,12,15,24	3.3,5,9,12,15,24	1500VDC	6-SIP
AMB_S-2WR3	2W	5,12,15,24	3.3,5,7.2,9,12,15,24	1500VDC	6-SIP
AMB_XT-1WR3	1W	3.3,5,12,15,24	3.3,5,9,12,15,24	1500VDC	SMD8
AMB_XT-2WR3	2W	5,12,15,24	3.3,5,7,9,12,15,24	1500VDC	SMD8
AME_S-1WR3	1W	3.3,5,12,15,24	±3.3,±5,±9,±12,±15,±24	3000VDC	7-SIP
AME_D-1WR3	1W	5,12,15,24	±5,±9,±12,±15	3000VDC	14-DIP
AME_D-2WR3	2W	5,12,15,24	±3.3,±5,±9,±12,±15,±24	3000VDC	14-DIP
AME_S-2WR3	2W	5,12,15,24	±3.3,±5,±9,±12,±15,±24	3000VDC	7-SIP
AME_XT-1WR3	1W	3.3,5,12,15,24	±3.3,±5,±9,±12,±15,±24	3000VDC	SMD10
AMF_D-1WB3	1W	5,12,15,24	3.3,5,12,15	3000VDC	7-DIP
AMFXT-2WR3	2W	5,12,15,24	3.3,5,7,9,12,15,24	3000VDC	SMD8
AMF_D-2WR3	2W	5,12,15,24	3.3,5,9,12,15,24	3000VDC	14-DIP
AMF_S-1WR3	1W	3.3,5,12,15,24	3.3,5,12,15,24	3000VDC	7-SIP
AMF_S-2WR3	2W	5,12,15,24	3.3,5,7.2,9,12,15,24	3000VDC	7-SIP
AMF_XT-1WR3	1W	3.3,5,12,15,24	3.3,5,9,12,15,24	3000VDC	SMD8
AMG_S-1WR3	1W	12,24	±5,±12,±15	6000VDC	7-SIP
AMG_S-2WR3	2W	12	±5,±9,±12,±15	6000VDC	7-SIP
AMH_S-1WR3	1W	12,24	3.3,5,9,12,15,24	6000VDC	7-SIP
AMH_S-2WR3	2W	12,15,24	5,9,12,15,24	6000VDC	7-SIP

0.75~1 W DC/DC Fixed input regulated output

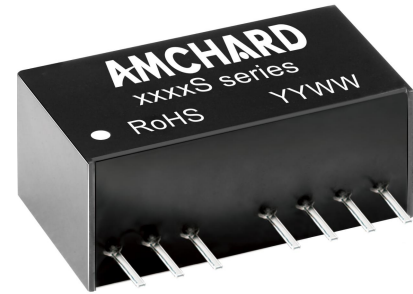
- ◆ Sustainable short-circuit protection
- ◆ Wide working temperature range: -40 °C to +85 °C
- ◆ Up to 88% efficiency
- ◆ The no-load current is as low as 5mA
- ◆ Ripple as low as 30mVp-p
- ◆ Multiple package: ,SIP,SMD
- ◆ Isolation voltage:1500/3000VDC
- ◆ Compliance with EN62368 standards



Amchard PN	Power	Input Voltage Range(VDC)	Output Voltage (VDC)	Isolation	Package
AMIB_XT-W75R3	0.75W	5,12	3.3,5,9,12,15	1500VDC	SMD 8
AMIB_XT-1WR3	1W	5,12,15,24	3.3,5,9,12,15	1500VDC	SMD 10
AMIF_XT-1WR3	1W	5,12,24	3.3,5,9,12,15	3000VDC	SMD 10
AMIB_S-W75R3	0.75W	5,12,24	3.3,5,9,12,15	1500VDC	4-SIP
AMIB_LS-1WR3	1W	5,12,15,24	3.3,5,9,12,15,24	1500VDC	6-SIP
AMIF_S-1WR3	1W	5,12,15,24	3.3,5,9,12,15,24	3000VDC	6-SIP

1~20W DC/DC Wide Input (2:1)

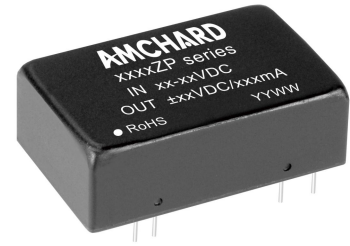
- ◆ Wide working temperature range: -40 °C to +85 °C
- ◆ Isolation voltage: 3000VDC
- ◆ Low ripple noise
- ◆ Short circuit protection (self recovery)
- ◆ Double & Single output
- ◆ Multiple package: SIP, DIP
- ◆ Isolation voltage: 1500/3000VDC
- ◆ Compliance with EN62368 standards



Amchard PN	Power (W)	Isolation (VDC)	Vin Range	Package	Channel NO.	Input Voltage Range(VDC)	Output Voltage (VDC)
GTA_YMD-10WR3	10	1500	2:1	DIP1"x1"	2	4.5-9	±5,±12,±15,±24
GTA_YMD-6WR3	6	1500	2:1	DIP1"x1"	2	9-18,18-36	±5,±12,±15
GTB_S-10WR3	10	1500	2:1	SIP	1	9-18,18-36	3.3,5,9,12,15,24
GTB_S-6WR3	6	1500	2:1	SIP	1	9-18,18-36	3.3,5,9,12,15,24
GTB_YMD-10WR3	10	1500	2:1	DIP1"x1"	1	4.5-9,9-18,18-36,36-75	3.3,5,12,15,24
GTB_YMD-15WR3	15	1500	2:1	DIP1"x1"	1	9-18,18-36,36-75	3.3,5,12,15,24
GTB_YMD-20WR3	20	1500	2:1	DIP1"x1"	1	9-18,18-36,36-75	3.3,5,12,15,24
GTB_YMD-6WR3	6	1500	2:1	DIP1"x1"	1	9-18,18-36,36-75	3.3,5,9,12,15,24
BTA_S-1WR2	1	1500	2:1	SIP	2	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15
BTA_S-3WR2	3	1500	2:1	SIP	2	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15,±24
BTA_ZP-3WR2	3	1500	2:1	DIP24	2	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15,±24
BTB_S-1WR2	1	1500	2:1	SIP	1	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24
BTB_S-3WR2	3	1500	2:1	SIP	1	4.5-9,9-18,18-36,36-75	3.3,5,6,9,12,15,24
BTB_ZP-3WR2	3	1500	2:1	DIP24	1	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24
BTE_P-3WR2	3	3000	2:1	DIP24	2	4.5-9,9-18,18-36,36-75	±3.3,±5,±9,±12,±15
BTE_S-1WR2	1	3000	2:1	SIP	2	4.5-9,9-18,18-36,36-75	±5,±12,±15
BTE_S-3WR2	3	3000	2:1	SIP	2	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15
BTF_P-3WR2	3	3000	2:1	DIP24	1	4.5-9,9-18,18-36,36-75	3.3,5,12,15,24
BTF_S-1WR2	1	3000	2:1	SIP	1	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24
BTF_S-3WR2	3	3000	2:1	SIP	1	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24

1~40 W DC/DC Wide Input(4:1 & 8:1)

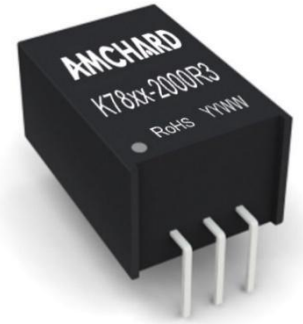
- ◆ Wide working temperature range: -40 °C to +85 °C
- ◆ Double & Single output
- ◆ Multiple package: SIP, DIP
- ◆ Isolation voltage: 1500/3000/6000VDC
- ◆ Low ripple noise
- ◆ Short circuit protection (self recovery)
- ◆ Compliance with EN62368 standards



Amchard Series	Power (W)	Isolation (VDC)	Vin Range	Package	Channel NO.	Input Voltage Range(VDC)	Output Voltage (VDC)
ATA_LD-20WR3	20	1500	4:1	DIP1"x1"	2	9-36,18-75	±5,±9,±12,±15
ATA_LD-30WR3	30	1500	4:1	DIP1"x1"	2	9-36,18-75	±5,±12,±15,±24
ATA_S-6WR3	6	1500	4:1	SIP	2	9-36	±5,±9,±12,±15,±24
ATA_YMD-10WR3	10	1500	4:1	DIP1"x1"	2	9-36,18-75	±5,±9,±12,±15,±24
ATA_YMD-15WR3	15	1500	4:1	DIP1"x1"	2	9-36,18-75	±5,±12,±15,±24
ATA_YMD-6WR3	6	1500	4:1	DIP1"x1"	2	9-36,18-75	±5,±12,±15,±24
ATA_ZP-10WR3	10	1500	4:1	DIP24	2	9-36,18-75	±5,±12,±15
ATA_ZP-6WR3	6	1500	4:1	DIP24	2	9-36,18-75	±5,±9,±12,±15,±24
ATB_S-10WR3	10	1500	4:1	SIP	1	9-36	3.3,5,9,12,15,24
ATB_S-6WR3	6	1500	4:1	SIP	1	9-36	3.3,5,9,12,15,24
ATB_YMD-10WR3	10	1500	4:1	DIP1"x1"	1	9-36	3.3,5,9,12,15,24
ATB_YMD-15WR3	15	1500	4:1	DIP1"x1"	1	9-36,18-75	3.3,5,12,15,24
ATB_YMD-30WR3	30	1500	4:1	DIP1"x1"	1	18-75	5121524
ATB_YMD-40WR3	40	1500	4:1	DIP1"x1"	1	9-36,18-75	3.3,5,12,15,24,28
ATB_YMD-6WR3	6	1500	4:1	DIP1"x1"	1	9-36	3.3,5,9,12,15,24
ATB_ZP-10WR3	10	1500	4:1	DIP24	1	9-36,18-75	3.3,5,12,15,24
ATB_ZP-6WR3	6	1500	4:1	DIP24	1	9-36,18-75	3.3,5,9,12,15,24
ATE_P-6WR3	6	3000	4:1	DIP24	2	9-36,18-75	±5,±12,±15
ATF_LP-10WR3	10	3000	4:1	DIP1"x1"	1	9-36,18-75	3.3,5,9,12,15,24
ATF_LP-20WR3	20	3000	4:1	DIP1"x1"	1	9-36,18-75	3.3,5,9,12,15,24
ATH_LP-20WR3	20	6000	4:1	DIP1"x1"	1	9-36,18-75	3.3,5,12,15,24
ATH_P-6WR3	6	6000	4:1	DIP24	1	9-36,18-75	56912151824
GTA_LD-20WR3	20	1500	4:1	DIP1"x1"	2	4.5-36	±5,±12,±15
GTA_ZP-10WR3	10	1500	4:1	DIP24	2	4.5-36	±5,±12,±15
GTA_ZP-6WR3	6	1500	4:1	DIP24	2	4.5-36	5,9,12,15
GTB_LD-15WR3	15	1500	4:1	DIP1"x1"	1	4.5-36	5,12,15
GTB_LD-20WR3	20	1500	4:1	DIP1"x1"	1	9-18,18-36,36-75	±5,±9,±12,±15,±24
GTB_LD-30WR3	30	1500	4:1	DIP1"x1"	1	9-18,18-36,36-75	±5,±12,±15
GTB_LD-40WR3	40	1500	4:1	DIP1"x1"	1	4.5-9,9-18,18-36,36-75	±5,±12,±15,±24
GTB_ZP-10WR3	10	1500	4:1	DIP24	1	18-36,36-75	3.3,5,12,15,24
GTB_ZP-6WR3	6	1500	4:1	DIP24	1	9-18,18-36,36-75	3.3,5,9,12,15,24,110
ABE_S-1WR3	1	3000	8:1	SIP	2	18-36,36-75	3.3,5,9,12,15,24
ABE_S-3WR3	3	3000	8:1	SIP	2	18-75	5,12,15,24
ABF_S-1WR3	1	3000	8:1	SIP	1	9-18,18-36,36-75	3.3,5,12,15,24
ABF_S-3WR3	3	3000	8:1	SIP	1	4.5-9,9-18,18-36,36-75	3.3,5,12,15,24

Non-isolated Switching Regulator

- ◆ Efficiency up to 96%
- ◆ No need for additional heat sink
- ◆ Can be connected as positive or negative output
- ◆ The no-load input current is as low as 0.2mA
- ◆ Sustainable short circuit, self recovery
- ◆ Pin compatible with K78xx or K79xx series, fully replacing three terminal regulators
- ◆ Compliance with EN62368 standards



Amchard series	Output current/mA	Isolation (KV)	Vin Range(V)	Package	Channel NO.
K78xx-1000R3	1000	non -isolated	24	SIP	1
K78xx-1000R3L	1000	non -isolated	8-36	SIP	1
K78xx-2000R3	2000	non -isolated	6-36	SIP	1
K78xx-2000R3L	2000	non -isolated	24	SIP	1
K78xx-500R3	500	non -isolated	6-36	SIP	1

DC/DC Converter for IGBT Driver

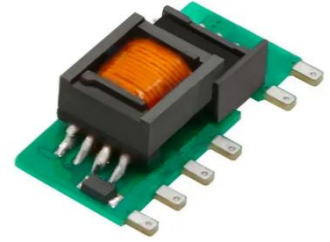
- ◆ Efficiency up to 80%
- ◆ Ultra-small SIP package
- ◆ Good temperature characteristics
- ◆ Isolation voltage 3000VAC
- ◆ Ultra-small isolation capacitor
- ◆ Operating temperature range :-40°C to +105°C
- ◆ Can be used without load
- ◆ Compliance with EN62368 standards



Amchard series	Isolation(VAC)	Vin Range(VDC)	Package
QA01	3000	15(14.5-15.5)	SIP7
QA01-09	3000	15(14.5-15.5)	SIP7
QA01-17	3000	15(14.5-15.5)	SIP
QA01-A09	3000	15(14.5-15.5)	SIP7
QA01C	3500	15(±10%)	SIP
QA01C-18	3500	15(±10%)	SIP
QA02	3000	12(11.4-12.6)	SIP7
QA03	3000	24(23.3-24.7)	SIP7
QA04	3000	12(9-15)	SIP7
QA051C	3500	5(±10%)	SIP
QA053-1509R3	5000	5(4.5-5.5)	SIP
QA053C-1505R3	5000	5(4.5-5.5)	SIP
QA053C-1803R3	5000	5(4.5-5.5)	SIP
QA053C-2004R3	5000	5(4.5-5.5)	SIP
QA1201C-20	3500	12(±3%)	SIP
QA121	3000	12(11.4-12.6)	SIP7
QA121C2	3500	12(±3%)	SIP
QA121C-20	3500	12	SIP
QA123-1509R3	5000	12(10.8-13.2)	SIP7
QA123C-1502R3	5000	12(10.8-13.2)	SIP
QA123C-1504R3	5000	12(10.8-13.2)	SIP
QA123C-1803R3	5000	12(10.8-13.2)	SIP
QA123C-2005R3	5000	12(10.8-13.2)	SIP
QA151	3500	15(13.5-16.5)	SIP
QA15115R2	3500	15(13.5-16.5)	SIP
QA151C	3500	15(13.5-16.5)	SIP
QA151C3	3500	15(±3%)	SIP
QA151M	3500	15(±10%)	SIP
QA153-1509R3	5000	15(13.5-16.5)	SIP
QA153C-1504R3	5000	15(13.5-16.5)	SIP
QA153C-1803R3	5000	15(13.5-16.5)	SIP
QA153C-2005R3	5000	15(13.5-16.5)	SIP
QA2401C-20	3500	24(±3%)	SIP
QA241	3000	24(22.8-25.2)	SIP7
QA243-1509R3	5000	24(21.6-26.4)	SIP
QA243C-1504R3	5000	24(21.6-26.4)	SIP
QA243C-1803R3	5000	24(21.6-26.4)	SIP
QA243C-2005R3	5000	24(21.6-26.4)	SIP

3-15W Cost-effective QO Series

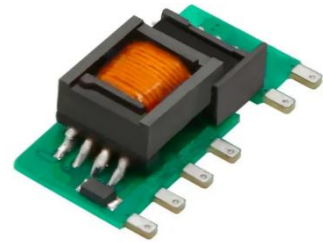
- ◆ Working temperature range: -40 ° C to +85 ° C
- ◆ Versatile application, flexible layout,
- ◆ Ultra small size, high power density,
- ◆ No-load power consumption of 0.1W
- ◆ Output short circuit and overcurrent protection
- ◆ Complies with EN62368 standards



Amchard series	Power (W)	Isolation (VAC)	Vin Range	Package	Channel NO.
QO03-13Bxx	3	3000	90-305V	ON BOARD	1
QO05-13Bxx	5	3600	90-305V	ON BOARD	1
QO10-13BxxR3	10	3600	90-305V	ON BOARD	1
QO15-23Bxx	15	4000	90-305V	ON BOARD	1

5-10W AC/DC Converter Specialized for ELECTRICITY

- ◆ Ultra wide input 85-529VAC/100-745 VDC
- ◆ Protections: Short circuit/ /Over voltage protection
- ◆ No load power is lower than 0.3W(230VAC)
- ◆ Switch frequency 65KHZ(typ.)
- ◆ High I/O isolation voltage 4000VAC



Amchard series	Power (W)	Isolation (VAC)	Vin Range	Package	Channel NO.
QO05-26BxxR3	5	4000	90-528V	ON BOARD	1
QO10-26BxxR3	10	4000	90-528V	ON BOARD	1

5-60W DIP Compact Size QM/QM-M Series

- ◆ Ultra wide input 85-529VAC/100-745 VDC
- ◆ Protections: Short circuit/ Over voltage protection
- ◆ No load power is lower than 0.3W(230VAC)
- ◆ Switch frequency 65KHZ(typ.)
- ◆ High I/O isolation voltage 4000VAC



Amchard series	Power (W)	Isolation (VAC)	Vin Range	Package
QM05-23BxxR2-M	5	4000	90-305V	ON BOARD
QM10-23BxxR2-M	10	4000	90-305V	ON BOARD
QM15-23BxxR2-M	15	4000	90-305V	ON BOARD
QM20-23BxxR2	20	4200	90-305V	ON BOARD
QM30-23BxxR2	30	4200	90-305V	ON BOARD
QM40-23BxxR2	40	4200	90-305V	ON BOARD
QM60-23BxxR2	60	4200	90-305V	ON BOARD
QM03-23BxxR2	3	4200	90-305V	ON BOARD
QM05-23BxxR2	5	4200	90-305V	ON BOARD
QM10-23BxxR2	10	4200	90-305V	ON BOARD
QM15-23BxxR2	15	4200	90-305V	ON BOARD
QM25-20BxxMU	30	4200	90-305V	ON BOARD

ACDC SMPS Din Rail 15-960W

- ◆ AC/DC Dual use (same terminal input voltage)
- ◆ Low standby power consumption, high efficiency
- ◆ Low ripple noise
- ◆ Output short circuit, over current, over voltage protection
- ◆ Compliance with EN62368 standards



	Amchard Series	Vout
DM Series(Single-phase DIN Rail Industrial Power Supply)	DM-75-XX	12V/24V/48V
	DM-120-XX	
	DM-240-XX	
	DM-480-XX	
	DM-960-XX	
DMT Series(Three-phase DIN Rail Industrial Power Supply)	DMT-240-XX	24V/48V
	DMT-480-XX	
	DMT-960-XX	
DME Series(Single-phase Economic DIN Rail Industrial Power Supply)	DME-75-XX	12V/24V/48V
	DME-120-XX	
	DME-150-XX	
DP Series(Single-phase Plastic DIN Rail Industrial Power Supply)	DP-15-XX	5V/12V/15V/24V/48V
	DP-30-XX	
	DP-60-XX	
	DP-100-XX	
	DP-150-XX	
DP-M Series(Single Output Industrial DIN Rail Power Supply)	DP-M10-XX	5V/12V/15V/24V/48V
	DP-M20-XX	
	DP-M40-XX	
	DP-M60-XX	
	DP-M100-XX	

ACDC SMPS Enclosed 15-3000W

- ◆ AC/DC Dual use (same terminal input voltage)
- ◆ Low standby power consumption, high efficiency
- ◆ Output short circuit and overcurrent protection
- ◆ Optional packaging appearance and PFC function
- ◆ Compliance with EN62368 standards



	Amchard Series	Vout
EN Series (Ultra-thin Industrial Standard Power Supply)	EN-15-XX	5V/12V/15V/24V/36V/48V
	EN-25-XX	
	EN-35-XX	
	EN-50-XX	
	EN-75-XX	
	EN-100-XX	
	EN-150-XX	
	EN-200-XX	
	EN-350-XX	
	EN-450-XX	
	EN-600-XX	
EN-P Series(High-power Enclosed Power Supply)	EN-P1000-XX	12V/24V/48V
	EN-P1500-XX	
	EN-P2000-XX	
	EN-P3000-XX	

Contact Us

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Thank you