COTEK

COTEK ELECTRONIC IND. CO., LTD

Switching Mode Power Supply

Always Power Ready



[1] Constant current limit

[2] I²C, PMBUS, RS232 communication protocol

[3] Built-in ORing FETs

[4] Support parallel operation via CANBUS

COTEK

Professional Power Solutions Design and Manufacturing

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2026/2027 Product Catalog

COTEK
Professional Power Solutions Design and Manufacturing

We aspire to enhance human life by simplifying complexity and enriching user experiences

COTEK is dedicated to listen to customer needs, and providing creative power conversion solutions accordingly.
Our extensive worldwide distribution network ensures efficient and timely service locally.
Furthermore, COTEK prioritize social and environmental responsibility and obtained ISO-14064-1 certification since 2023, marking the milestone for carbon reduction.
Being a D&B ESG mark certified enterprise COTEK embraced ESG principles in our daily operations to make our society and environment better and greener.

COTEK Profile

COTEK is committed to providing proactive service, innovative technology and total quality assurance since COTEK was established in 1986. With Corporate Offices in Taoyuan, Taiwan, COTEK is a technology-oriented company focusing on developing, designing and manufacturing products including:

1. DC / AC Pure Sine Wave Inverter
2. Inverter / Charger
3. Battery Charger
4. AC / DC Switching Mode Power Supply
5. Rack Inverter
6. Rectifier

2018 2019 2020 2021 2022

D&B Top 1000 Elite SME Award
D-U-N-S Number : 65-728-6662

Applications ▶



Industrial

Process Control
Burn-in
Test & Measurement
Laser-Carving
Factory Automation
Digital Signage/Display
Industrial Robotics
Aerospace grounding power
Lighting

Why Cotek:

- Universal Input
- Wide programmable range
- PCBA conformal coating as default



Charging

EBUS/EV Charging
Warehouse automation
Smart Retail (Robotic)

Why Cotek:

- Constant current limit
- Wide programmable range
- Remote communication & setting
- Parallel Connection
- CT-211 (optional charger board) to set CC, CV and floating curve for charger applications

Medical

Clinical Monitoring and Therapy
Mobile Medical Equipment
Home Healthcare
Respiratory Care
High-Power Surgical and Imaging Systems
Critical Care and Life Support Systems
In-Vitro Diagnostics (IVD)

Why Cotek:

- ITE and Medical Approval
- Meets 2 × MOPP (Means of Patient Protection) isolation
- 4kVac input-to-output withstand voltage
- Ultra-Low Leakage Current
- Multi-Protocol Compatibility
- 1U Low Profile Form Factor





Conveyor

Conveyor Systems (Sortation, Crossbelt Sorter, etc.)
AGV Systems
Palletising and Depalletising System

Why Cotek:

- Wide programmable range
- Communication protocol available for PLC integration
- Parallel connection to support the power requirement for long distance production line
- Remote sense compensation voltage <0.5V
- Customized output voltage as default setting without having to update the safety approvals (cost saving)

Product Index ▶ General / Industrial / Medical

Photo	Type	Output	Series	Safety	Communication Protocol	DC Output	Power Rating (Wattages) 500	800	1500	2000	3000	Page
	Enclosed	Single	**ADM**	ITE, Medical	Ethernet, PMBus, Modbus, RS-232/485, CANBus	LV	●		●	●		P.7
						HV				●		
			**AD**	ITE	Ethernet, PMBus, Modbus, RS-232/485, I²C	LV			●			P.9
						HV			●			
			**AE**	ITE	RS-232/485, I²C	LV		●	●		●	P.11
			**AEK**	ITE	RS-232/485, I²C	LV					● ●	P.13
						HV					●	

■ Model Naming Rule: AD-1500-XXX-①②③

AD : Product Series　**1500** : Wattage　**XXX** : Output voltage　①②③ can be PMB(A23) / MOD(A24) / RS4(C11) / ETH(D11)

● = ORing Version　● = Non ORing Version

Accessories

Photo	Model Name	Description	Applicable Series
	CT - 201/204/251/551	RS-232 / 485 Interface card	■ For AE, AEK Series
	CT-211	Charger board	■ For AE, AEK-3000-LV Series

Note: For the Accessories detail spec., please contact Sales if required.

Photo	Model Name	Description	Applicable Series
	AD - COMM - PMB (A23) / MOD (A24) RS4 (C11) / ETH (D11)	Communication Interface card	■ For AD-1500 Series

Communication protocol: PMB(A23) : UART (RS-485), Meet PMBus　RS4(C11) : UART (RS-485), Single unit only
MOD(A24) : MODBUS & Meet PMBUS　ETH(D11) : Ethernet

COTEK

ADM Series

500W / 2000W 12~400VDC
Programmable Digital Power Supply

Support Ethernet

Medical Version



Features

- ITE and Medical Safety Approvals
- Universal AC Input Full Range (90~264Vac)
- Programmable output voltage & current 0~105%
- Support series and parallel operation
- Constant current limit
- AUX POWER：5V/1A
- Remote sense function
- Built-in ORing FETs/ Diode
- Remote ON/OFF
- 1U Low Profile Form Factor
- Power OK Signal
- Support PMBus, Modbus, CANBus and Ethernet communication
- Protection: OVP, OLP, OTP, AC Failure, Power and Fan Failures

Protection	
Over Load	105% rated output power Protection type: Constant current limit
Over Voltage	Programmable OVP, 120 ± 7% Vout. Protection Type :Auto Recovery after Output Voltage is within allowed range
Over Temperature	Yes, Protection Type : Auto Recovery after Temperature goes down
Function	
Auxiliary Power	5V up to 1A (ETH Version 0.1A, RS4 Version 1A)
Remote ON/OFF Control	By external switch / communication
Power OK Signal	Open drain signal low when PSU turns on, Max. sink current: 20mA, Max. drain voltage: 40V
Output Voltage Trim	Adjustment of output voltage is between 0 ~ 105% of rated output
Output Current Trim	Adjustment of output current is between 0 ~ 105% of rated output
Parallel	Current Sharing
Environment	
Working Temperature	-40 ~ +70°C (Refer to load de-rating curve)
Working Humidity	20 ~ 90% RH non-condensing
Storage Temp. & Humidity	-40°C ~ 80°C, 10 ~ 95% RH
Temperature Coefficient	± 0.02% / °C (0°C ~ 50°C)
Vibration	IEC60068-2-6
Safety & EMC	
Safety Standards	UL/EN62368-1, IEC/EN60601-1(type BF, only 12V-150V)
Withstand Voltage	I/P-O/P : 4kVac(2xMOPP) I/P-FG : 1.5kVac(MOPP) O/P-FG : 1.5kVac(MOPP)
Touch Leakage Current	<100uA(NC) <500uA(SFC)
Earth Leakage Current	<5mA(NC) <10mA(SFC)
Power Harmonic & Voltage Fluctuation and Flicker	EN 61000-3-2; EN 61000-3-3
EMS Immunity	EN55035; EN 60601-1-2
Other	
Cooling	Load and temperature control fan
Product Dimension (WxHxD)	ADM-500 : 127 x 41 x 203 mm, ADM-2000 : 127x41x310mm
Packing	ADM-500 : 1.2kg, ADM-2000 : 1.8kg

Output	ADM-500-12-xxx	ADM-500-15-xxx	ADM-500-24-xxx	ADM-500-30-xxx	ADM-500-36-xxx	ADM-500-48-xxx	ADM-500-60-xxx
DC Voltage	12V	15V	24V	30V	36V	48V	60V
Rated Current	41.7A	33.4A	20.9A	16.7A	13.9A	10.5A	8.8A
Rated Power	500W						
Ripple & Noise (Max.)	150mVp-p	150mVp-p	240mVp-p	300mVp-p	360mVp-p	480mVp-p	570mVp-p
Voltage Range	0~105% Rated Voltage						
Voltage Tolerance	±1.0% (rate output voltage of single unit)						
Current Tolerance	±3.0% (rate output current of single unit)						
Line & Load Regulation	± 1.0%						
Setup, Rise Time	1800ms , 130ms / 230Vac at full load						
Hold Up Time (Typ.)	16ms / 230Vac at full load						
Input							
Voltage Range	90 ~ 264VAC, 127~373VDC						
Frequency Range	47~63Hz						
Power Factor (Typ.)	115V/0.98 ; 230V/0.95						
Efficiency (Typ.)	87%	88%	90%	90%	90%	90%	91%
AC Current (Typ.)	2.6A at 230Vac						
Inrush Current (Typ.)	30A / 115VAC, 60A / 230VAC						

Output	ADM-2000-12V/15V-xxx	ADM-2000-24V/30V-xxx	ADM-2000-48V/60V-xxx
DC Voltage	12V / 15V	24V / 30V	48V / 60V
Rated Current	12V : 125A / 15V : 100A	24V : 83.3A / 30V : 66.6A	48V : 41.6A / 60V : 33.3A
Rated Power	1500W	2000W	
Ripple & Noise (Max.)	150mVp-p	300mVp-p	570mVp-p
Voltage Adj. Range	±5.0% Typical adjustment		
Voltage Tolerance	±1.0% (rate output voltage of single unit)		
Current Tolerance	±3.0% (rate output current of single unit)		
Line & Load Regulation	± 1.0%		
Setup, Rise Time	1800ms, 150ms at full load (230V ac)		
Hold Up Time (Typ.)	14ms / 230VAC at full load		
Input			
Voltage Range	90 ~ 264VAC, 127 ~ 370VDC (Refer to de-rating curve)		
Frequency Range	47~63Hz		
Power Factor (Typ.)	0.95 / 230VAC, 0.98 / 115VAC at ful load		
Efficiency (Typ.)	89%	91%	92%
AC Current (Typ.)	18A / 115VAC, 9A / 230VAC		
Inrush Current (Typ.)	30A / 115VAC, 60A / 230VAC		

Output	ADM-1500-120V/150V-xxx	ADM-1500-200V/250V-xxx	ADM-1500-300V/400V-xxx
DC Voltage	120V / 150V	200V / 250V	300V / 400V
Rated Current	120V : 16.6A / 150V : 13.3A	200V : 10A / 250V : 8A	300V : 6.6A / 400V : 5A
Rated Power	2000W		
Ripple & Noise (Max.)	1500mVp-p	2500mVp-p	4000mVp-p
Voltage Adj. Range	± 5.0% Typical adjustment		
Voltage Tolerance	± 1.0% (rate output voltage of single unit)		
Current Tolerance	±3.0% (rate output current of single unit)		
Line & Load Regulation	± 1.0%		
Setup, Rise Time	1800ms, 200ms at full load (230V ac)		
Hold Up Time (Typ.)	14ms / 230VAC at full load		
Input			
Voltage Range	90 ~ 264VAC, 127 ~ 370VDC (Refer to de-rating curve)		
Frequency Range	47~63Hz		
Power Factor (Typ.)	0.95 / 230VAC, 0.98 / 115VAC at full load		
Efficiency (Typ.)	92%		
AC Current (Typ.)	18A / 115VAC, 9A / 230VAC		
Inrush Current (Typ.)	30A / 115VAC, 45A / 230VAC		

*ADM-2000-120-xxx, xxx can be **RS4 or ETH**

COTEK

AD-1500

1.5KW 12~400VDC Programmable Digital Power Supply

Support Ethernet



Features

- Universal AC input/Full range (90~264Vac)
- Programmable output voltage & current 0~105%
- Forced current sharing at parallel operation
- Constant current limit
- AUX POWER：+5.0V/1.0A auxiliary
- Built-in OR'ing FETs/ Diode
- Built-in VR to adjust output voltage & current (RS4(C11) version)
- Built-in EEPROM to memorize power supply settings
- Support parallel operation via CANBus / CANBus Built-in isolation circuit (PMB(A23), MOD(A24), ETH(D11) Version)
- Power OK signal
- Remote ON/OFF
- Intelligent GUI to set and monitor parameters
- Power OK signal (built-in isolation circuit)
- Protection: OVP, OLP, OCP, OTP, UTP, AC/Power/Fan Failure
- Support PMBus(meet), MODBUS, RS232/485, I²C and Ethernet protocols (Reference datasheet for detail interface version info.)
- Optional Changeable interface cards: PMB(A23), MOD(A24), RS4(C11) & ETH(D11)

Protection		
Over Load	105% rated output power	Protection type: Constant current limit
Over Voltage	Programmable OVP, 120 ± 7% Vout.	Protection type: Latch-style (Recovery after reset AC power ON or inhibit)
Over Temperature	Detect on NTC, Protection type: Auto recovery after temperature goes down	
Function		
Auxiliary Power	+5.0V / 1.0A	
Remote ON/OFF Control	By external switch / communication	
Power OK Signal	Open drain signal low when PSU turns on, Max. sink current: 20mA, Max. drain voltage: 40V	
Output Voltage Trim	Adjustment of output voltage is between 0% ~ 105% of rated output (C11 Version)	
Output Current Trim	Adjustment of output current is between 0% ~ 105% of rated output (C11 Version)	
Parallel	Current sharing via CANBUS (A23 & A24 Version)	
Environment		
Working Temperature	-25 ~ +60°C (Refer to load de-rating curve)	
Working Humidity	20 ~ 90% RH non-condensing	
Storage Temp. & Humidity	-40°C ~ 85°C, 10 ~ 95% RH	
Temperature Coefficient	± 0.02% / °C (0°C ~ 50°C)	
Vibration	10 ~ 500Hz, 2G 10min. / 1cycle, period for 60min. each along X, Y, Z axes Compliance to IEC 68-2-6, IEC 68-2-64	
Safety & EMC		
Safety Standards	UL 62368-1; EN 62368-1	
Withstand Voltage	I/P-O/P: 3KVAC (4242VDC), I/P-FG: 1.5KVAC (2121VDC), O/P-FG: 0.5KVAC (707VDC)	
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC	
EMI Conduction & Radiation	EN 55032; EN 61204-3; EN 61000-6-3	
Power Harmonic & Voltage Fluctuation and Flicker	EN 61000-3-2; EN 61000-3-3	
EMS Immunity	EN55035: 2017 / A11: 2020 ; IEC 61000-4-2,3,4,5,6,8,11	
Other		
Cooling	Load and temperature control fan	
Product Dimension (WxHxD)	LV : 127.8 x 64 x 313.7 mm / 5.03 x 2.52 x 12.35 inch	HV : 127.8 x 64 x 296.3 mm / 5.03 x 2.52 x 11.67 inch
Packing	LV : 2.42kg; 6pcs / 17.2kg / 1.86CUFT	HV : 2.21kg; 6pcs / 16kg / 1.86 CUFT

Low Output Voltage (LV)

	AD-1500-12-xxx	AD-1500-15-xxx	AD-1500-24-xxx	AD-1500-30-xxx	AD-1500-36-xxx	AD-1500-48-xxx	AD-1500-60-xxx
Output							
DC Voltage	12V	15V	24V	30V	36V	48V	57V
Rated Current	125A	100A	62.5A	50A	41.7A	31.3A	26.32A
Current Range	0 ~ 125A	0 ~ 100A	0 ~ 62.5A	0 ~ 50A	0 ~ 41.7A	0 ~ 31.3A	0 ~ 26.32A
Rated Power*	1500W						
Ripple & Noise (Max.)	150mVp-p	150mVp-p	240mVp-p	300mVp-p	360mVp-p	480mVp-p	570mVp-p
Voltage Adj. Range	±5.0% Typical adjustment						
Voltage Tolerance	±2.0% (rate output voltage of single unit)						
Current Tolerance	±3.0% (rate output current of single unit)						
Line Regulation	±1.0%						
Load Regulation	±1.0%						
Setup, Rise Time	1300ms, 100ms at full load (230V ac)						
Hold Up Time (Typ.)	14ms / 230VAC at full load						
Input							
Voltage Range	90 ~ 264VAC, 127~370VDC (Refer to de-rating curve)						
Frequency Range	47 ~ 63Hz						
Power Factor (Typ.)	0.95 / 230VAC, 0.99 / 115VAC at ful load						
Efficiency (Typ.)	89%	90%	92%	92%	92%	92%	93%
AC Current (Typ.)	18A / 115VAC, 9A / 230VAC						
Inrush Current (Typ.)	30A / 115VAC, 45A / 230VAC						
Leakage Current	< 3.5mA / 240VAC						

High Output Voltage (HV)

	AD-1500-120-xxx	AD-1500-150-xxx	AD-1500-250-xxx	AD-1500-400-xxx
Output				
DC Voltage	120V	150V	250V	400V
Rated Current	12.5A	10.0A	6.0A	3.75A
Current Range	0 ~ 12.5A	0 ~ 10.0A	0 ~ 6.0A	0 ~ 3.75A
Rated Power*	1500W			
Ripple & Noise (Max.)	1200mVp-p	1500mVp-p	2500mVp-p	4000mVp-p
Voltage Adj. Range	±5.0% Typical adjustment			
Voltage Tolerance	±2.0% (rate output voltage of single unit)			
Current Tolerance	±3.0% (rate output current of single unit)			
Line Regulation	± 1.0%			
Load Regulation	± 1.0%			
Setup, Rise Time	1200ms, 100ms at full load (230V ac)			
Hold Up Time (Typ.)	14ms / 230VAC at full load			
Input				
Voltage Range	90 ~ 264VAC, 127~370VDC (Refer to de-rating curve)			
Frequency Range	47~63Hz			
Power Factor (Typ.)	0.95 / 230VAC, 0.99 / 115VAC at ful load			
Efficiency (Typ.)	92%			
AC Current (Typ.)	18A / 115VAC, 9A / 230VAC			
Inrush Current (Typ.)	30A / 115VAC, 45A / 230VAC			
Leakage Current	< 3.5mA / 240VAC			

*AD-1500-120-xxx, xxx can be **PMB**(A23), **MOD**(A24), **RS4**(C11) **or ETH**(D11)
Communication protocol: **PMB**(A23): UART (RS-485) and Meet PMBus, **MOD**(A24): MODBUS & Meet PMBUS,
RS4(C11): UART (RS-485), **ETH**(D11): Ethernet

*Rated power could be de-rated when AC input is below 100VAC, please refer to datasheet

COTEK

AE-Series

800W~3KW Wide Programmable Range Single Output Power Supply



Features

- Universal AC input / Full range
- Programmable output voltage & current (0%~105%)
- Forced current sharing at parallel operation
- Constant current limit
- Selectable +5V / 0.5A or +9V / 0.3A auxiliary output
- Global control via RS232 / RS485 protocol
- Remote setting multiple PSU via RS-232, RS-485 & I²C
- Power OK signal
- Remote ON / OFF, Remote sense function
- Protection: OVP, OLP, OTP, OCP and Fan Failure

Protection	
Over Load	105% rated output power, Protection type: Constant current limit
Over Voltage	Variable OVP Refer to VCI VS OVP curve.(OVP Tolerance 7%) Protection type : Latch-style (Recovery after reset AC power ON or inhibit)
Over Temperature	85 ±5°C detect on NTC, Protection type: Auto recovery after temperature goes down
Environment	
Working Temperature	AE-800 : -20 ~ +60°C AE-1500 & AE-3000 : -25 ~ +60°C (Refer to load de-rating curve)
Working Humidity	20 ~ 90% RH non-condensing
Storage Temp. & Humidity	-40°C ~ 85°C, 10 ~ 95% RH
Temperature Coefficient	± 0.02% / °C (0°C ~ 50°C)
Vibration	10 ~ 500Hz, 2G 10min. / 1cycle, period for 60min. each along X, Y, Z axes Compliance to IEC60068-2-6; IEC60068-2-64
Safety & EMC	
Safety Standards	Certified EN 62368-1; UL62368-1
Withstand Voltage	I/P-O/P: 3KVAC (4242VDC), I/P-FG: 1.5KVAC (2121VDC), O/P-FG: 0.5KVAC (707VDC)
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC (25°C / 70% RH)
EMI Conduction & Radiation	Certified EN 55032; EN 61204-3; EN 610000-6-3
Power Harmonic & Voltage Fluctuation and Flicker	Certified EN 61000-3-2; EN 61000-3-3
EMS Immunity	Certified EN 55035: 2017 / A11: 2020; IEC 61000-4-2,3,4,5,6,8,11
Other	
Cooling	Load and temperature control fan
Product Dimension (WxHxD)	AE-800 : 127x41x249 mm / 5.00x1.61x9.80 inch AE-1500 : 127x64x280 mm / 5.00x2.52x11.02 inch AE-3000 : 127x127x325mm/5.00x5.00x12.80 inch
Packing	AE-800 : Per Product 1.62kgs ; 9pcs / 17kg / 2.03CUFT AE-1500 : Per Product 2.6kg; 6pcs / 16.6kg / 1.86CUFT AE-3000 : Per Product 5.25kgs ; 4pcs / 22kg / 1.86CUFT

Product Spec.

Output	AE-800-12	AE-800-15	AE-800-24	AE-800-30	AE-800-36	AE-800-48	AE-800-60
DC Voltage	12V	15V	24V	30V	36V	48V	60V
Rated Current	66.7A	53.4A	33.5A	26.7A	22.3A	16.7A	13.4A
Rated Power*	800W						
Ripple & Noise (Max.)	120mVp-p	150mVp-p	240mVp-p	300mVp-p	360mVp-p	480mVp-p	600mVp-p
Voltage Adj. Range	± 5.0% Typical adjustment by potentiometer. (VR1)						
Voltage Tolerance	±2.0% (rated output voltage of single unit)						
Current Tolerance	±3.0% (rated output current of single unit)						
Line & Load Regulation	± 1.0%						
Setup, Rise Time	800ms, 100ms at full load						
Hold Up Time (Typ.)	8ms / 230VAC at full load						
Input							
Voltage Range	90 ~ 264VAC, 127 ~ 370VDC (Refer to de-rating curve)						
Frequency Range	47~63Hz						
Power Factor (Typ.)	0.95 / 230VAC, 0.98 / 115VAC at full load						
Efficiency (Typ.)	89%	90%	92%	92%	92%	92%	93%
AC Current (Typ.)	9.3A / 115VAC, 3.5A / 230VAC						
Inrush Current (Typ.)	30A / 115VAC, 60A / 230VAC						
Leakage Current	< 3.5mA / 240VAC						

Output	AE-1500-12	AE-1500-15	AE-1500-24	AE-1500-30	AE-1500-36	AE-1500-48	AE-1500-60
DC Voltage	12V	15V	24V	30V	36V	48V	60V
Rated Current	125A	100A	62.5A	50A	41.7A	31.3A	25A
Rated Power*	1500W						
Ripple & Noise (Max.)	150mVp-p	150mVp-p	240mVp-p	300mVp-p	360mVp-p	480mVp-p	600mVp-p
Voltage Adj. Range	±5.0% Typical adjustment by potentiometer. (Via V-Adj from PSU front panel)						
Voltage Tolerance	±2.0% (rated output voltage of single unit)						
Current Tolerance	±3.0% (rated output current of single unit)						
Line & Load Regulation	± 1.0%						
Setup, Rise Time	800ms, 100ms at full load						
Hold Up Time (Typ.)	14ms / 230VAC at full load						
Input							
Voltage Range	90 ~ 264VAC, 127 ~ 370VDC (Refer to de-rating curve)						
Frequency Range	47~63Hz						
Power Factor (Typ.)	0.95 / 230VAC, 0.99 / 115VAC at ful load						
Efficiency (Typ.)	89%	90%	91%	92%	92%	92%	93%
AC Current (Typ.)	18A / 115VAC, 9A / 230VAC						
Inrush Current (Typ.)	30A / 115VAC, 45A / 230VAC						
Leakage Current	< 3.5mA / 240VAC						

Output	AE-3000-12	AE-3000-15	AE-3000-24	AE-3000-30	AE-3000-36	AE-3000-48	AE-3000-60
DC Voltage	12V	15V	24V	30V	36V	48V	60V
Rated Current	250A	200A	125A	100A	83.5A	62.5A	50A
Rated Power*	3000W						
Ripple & Noise (Max.)	150mVp-p	150mVp-p	240mVp-p	300mVp-p	360mVp-p	480mVp-p	600mVp-p
Voltage Adj. Range	± 5.0% Typical adjustment by potentiometer. (VR1)						
Voltage Tolerance	± 2.0%						
Current Tolerance	±3.0% (rated output current of single unit)						
Line & Load Regulation	± 1.0%						
Setup, Rise Time	2000ms, 100ms at full load						
Hold Up Time (Typ.)	14ms / 230VAC at full load						
Input							
Voltage Range	90 ~ 264VAC, 127 ~ 370VDC (Refer to de-rating curve)						
Frequency Range	47~63Hz						
Power Factor (Typ.)	0.95 / 230VAC, 0.98 / 115VAC at full load						
Efficiency (Typ.)	89%	90%	91%	91%	92%	92%	93%
AC Current (Typ.)	36A / 115VAC (3000W), 18A / 230VAC (3000W)						
Inrush Current (Typ.)	60A / 115VAC, 90A / 230VAC						
Leakage Current	< 3.5mA / 240VAC						

COTEK

AEK-Series

3KW 12~400VDC Wide Programmable Range Single Output Power Supply



Features

- Universal AC input / Full range
- Programmable output voltage & current (0%~105%)
- High power density 16.3W / inch^3
- Forced current sharing at parallel operation
- Constant current limit
- Selectable +5V / 0.5A or +9V / 0.3A auxiliary output
- Remote setting multiple PSU via RS-232, RS-485 & I^{2}C
- Built-in Oring Diode
- Power OK signal
- Remote ON / OFF, remote sense function
- Protection: OVP, OLP, OTP, OCP and Fan Failure
- Global control via RS232 / RS485 protocol
- Built-in isolation IC for communication
- Built-in I^{2}C and RS485 communication interface

	AEK-3000
Protection	
Over Load	105% rated output power. Protection type: Constant current limit
Over Voltage	Variable OVP, 120±7% Vout. Refer to VCI v.s. OVP curve in the datasheet Protection type: Latch-style (Recovery after reset AC power ON or inhibit)
Over Temperature	85 ± 5°C detect on NTC, Protection type: Auto recovery after temperature goes down
Environment	
Working Temperature	-20 ~ +60°C (Refer to load de-rating curve)
Working Humidity	20 ~ 90% RH non-condensing
Storage Temp. & Humidity	-40°C ~ 85°C, 10 ~ 95% RH
Temperature Coefficient	± 0.02% / °C (0°C ~ 50°C)
Vibration	10 ~ 500Hz, 2G 10min. / 1cycle, period for 60min. each along X, Y, Z axes Compliance to IEC 60068-2-6, IEC 60068-2-64
Safety & EMC	
Safety Standards	Certified UL 62368-1; EN 62368-1
Withstand Voltage	I/P-O/P: 3KVAC (4242VDC), I/P-FG: 1.5KVAC (2121VDC), O/P-FG: 0.5KVAC (707VDC)
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC (25°C / 70% RH)
EMI Conduction & Radiation	Certified EN 55032; EN 61204-3; EN 610000-6-3
Power Harmonic & Voltage Fluctuation and Flicker	Certified EN 61000-3-2; EN 61000-3-3
EMS Immunity	Certified EN 55035: 2017 / A11: 2020; IEC 61000-4-2,3,4,5,6,8,11
Other	
Cooling	Load and temperature control fan
Product Dimension (WxHxD)	LV & HV : 170x64x280 mm / 6.69x2.52x11.02 inch
Packing	LV : 3.9kg; 6pcs / 25.9kg / 2.48CUF HV : 3.3kg; 6pcs / 22.7kg / 2.48CUFT

Product Spec.

Low Output Voltage (LV)

	AEK-3000-12	AEK-3000-15	AEK-3000-24	AEK-3000-30	AEK-3000-36	AEK-3000-48	AEK-3000-60
Output							
DC Voltage	12V	15V	24V	30V	36V	48V	60V
Rated Current	200A	160A	125A	100A	83.5A	62.5A	50A
Current Range	0 ~ 200A	0 ~ 160A	0 ~ 125A	0 ~ 100A	0 ~ 83.5A	0 ~ 62.5A	0 ~ 50A
Rated Power*	2400W	2400W	3000W	3000W	3006W	3000W	3000W
Ripple & Noise (Max.)	150mVp-p	150mVp-p	240mVp-p	300mVp-p	360mVp-p	480mVp-p	600mVp-p
Voltage Adj. Range	±5.0% Typical adjustment by potentiometer. (Via V-Adj from PSU front panel)						
Voltage Tolerance	±2.0% (rated output voltage of single unit)						
Current Tolerance	±3.0% (rated output current of single unit)						
Line Regulation	±1.0%						
Load Regulation	±1.0%						
Setup, Rise Time	800ms, 100ms at full load						
Hold Up Time (Typ.)	14ms / 230VAC at full load						
Input							
Voltage Range	90 ~ 264VAC, 127 ~ 370VDC (Refer to de-rating curve)						
Frequency Range	47~63Hz						
Power Factor (Typ.)	0.95 / 230VAC, 0.98 / 115VAC at full load						
Efficiency (Typ.)	88%	89%	91%	91%	92%	92%	93%
AC Current (Typ.)	19.7A / 115VAC (2000W), 16.5A / 230VAC (3000W)						
Inrush Current (Typ.)	33A / 115VAC, 65A / 230VAC						
Leakage Current	< 3.5mA (240VAC)						

High Output Voltage (HV)

	AEK-3000-150	AEK-3000-200	AEK-3000-250	AEK-3000-300	AEK-3000-400
Output					
DC Voltage	150V	200V	250V	300V	400V
Rated Current	20A	15A	12A	10A	7.5A
Current Range	0 ~ 20A	0 ~ 15A	0 ~ 12A	0 ~ 10A	0 ~ 7.5A
Rated Power*	3000W	3000W	3000W	3000W	3000W
Ripple & Noise (Max.)	1500mVp-p	2000mVp-p	2500mVp-p	3000mVp-p	4000mVp-p
Voltage Adj. Range	±5.0% Typical adjustment by potentiometer. (Via V-Adj from PSU front panel)				
Voltage Tolerance	±2.0% (rated output voltage of single unit)				
Current Tolerance	±3.0% (rated output current of single unit)				
Line Regulation	±1.0%				
Load Regulation	± 1.0%				
Setup, Rise Time	1100ms, 350ms at full load				
Hold Up Time (Typ.)	14ms / 230VAC at full load				
Input					
Voltage Range	90 ~ 264VAC, 127 ~ 370VDC (Refer to de-rating curve)				
Frequency Range	47~63Hz				
Power Factor (Typ.)	0.95 / 230VAC, 0.98 / 115VAC at full load				
Efficiency(Typ.) STD/ORing	93% / 91%				
AC Current (Typ.)	19.7A / 115VAC (2000W), 14.5A / 230VAC (3000W)				
Inrush Current (Typ.)	33A / 115VAC, 65A / 230VAC				
Leakage Current	< 3.5mA (240VAC)				