AC & DC Electronic Load

SPECIFICATIONS

MODEL		AEL-5002-350-18.75	AEL-5003-350-28	AEL-5004-350-37.5	AEL-5002-425-18.75	AEL-5003-425-28	AEL-5004-425-37.5
Power (W)		1875 W	2800W	3750 W	1875 W	2800W	3750 W
Current(Ampere)		18.75 Arms / 56.25Apeak	28 Arms / 84Apeak	37.5 Arms / 112.5Apeak	18.75 Arms / 56.25Apeak	28 Arms / 84Apeak	37.5 Arms / 112.5Apeak
Voltage(Volt)		50~350Vrms / 500Vdc			50~425Vrms / 600Vdc		
FREQUENCY Range		DC,40~440Hz(CC,CP Mode) , DC~440Hz(LIN,CR,CV Mode)			DC,40~440Hz(CC,CP Mode) , DC~440Hz(LIN,CR,CV Mode)		
PROTECTIONS							
Over Power Protection		≒ 1968.75Wrms or Programmable	≒2940Wrms or Programmable	≒ 3937.5Wrms or Programmable	≒ 1968.75Wrms or Programmable	≒2940Wrms or Programmable	≒ 3937.5Wrms or Programmable
Over Current Protection		≒ 19.687 Arms or Programmable	≒ 29.4 Arms or Programmable	≒ 39.375 Arms, or Programmable	≒ 19.687 Arms or Programmable	≒ 29.4 Arms or Programmable	≒ 39.375 Arms, or Programmable
Over Vlotage Protection		≒ 367.5 Vrms / 525Vdc			≒ 446.25 Vrms/630Vdc		
Over Temp. Protection		Yes			Yes		
OPERATION MODE							
Constant Current Mode for Sine-Wave							
Range		0~18.75A	0~28A	0~37.5A	0~18.75A	0~28A	0~37.5A
Resolution		0.3125mA/16bits	0.5mA/16bits	0.625mA/16bits	0.3125mA/16bits	0.5mA/16bits	0.625mA/16bits
Accuracy		± (0.1% of setting + 0.2% of range) @ 50/60Hz			± (0.1% of setting + 0.2% of range) @ 50/60Hz		
Linear Constant Current Mode for Sine-Wave, Square-Wave or Quasi-Square Wave, PWM Wave							
Range		0~18.75A	0~28A	0~37.5A	0~18.75A	0~28A	0~37.5A
Resolution		0.3125mA/16bits	0.5mA/16bits	0.625mA/16bits	0.3125mA/16bits	0.5mA/16bits	0.625mA/16bits
Accuracy		± (0.1% of setting + 0.2% of range) @ 50/60Hz			± (0.1% of setting + 0.2% of range) @ 50/60Hz		
Constant Resistance Mode							
Range		3.2 ohm ~ 64K ohm	2.0 ohm ~ 40K ohm	1.6 ohm ~ 32K ohm	3.2 ohm ~ 64K ohm	2.0 ohm ~ 40K ohm	1.6 ohm ~ 32K ohm
Resolution*1		0.0052083mS/16bits	0.0083333mS/16bits	0.010416mS/16bits	0.0052083mS/16bits	0.0083333mS/16bits	0.010416mS/16bits
Accuracy		±0.2% of (setting + range) @ 50/60Hz			±0.2% of (setting + range) @ 50/60Hz		
Constant Voltage Mode							
Range		50~350Vrms / 500Vdc			50~425Vrms / 600Vdc		
Resolution		0.01V			0.1V		
Accuracy		±(0.1% of setting + 0.1% of range)			±(0.1% of setting + 0.1% of range)		
Constant Power Mode							
Range		1875W	2800W	3750W	1875W	2800W	3750W
Resolution		0.1W	0.1W	0.1W	0.1W	0.1W	0.1W
Accuracy		±(0.1% of setting + 0.1% of range)			±(0.1% of setting + 0.1% of range)		
CREST FACTOR (CC & CP MODE ONLY)							
Range		√2~5			√2~5		
Resolution		0.1			0.1		
Accuracy		(0.5% / Irms) + 1%F.S.			(0.5% / Irms) + 1%F.S.		
POWER FACTOR (CC & CP MODE ONLY)							
Range		0~1 Lag or Lead			0~1 Lag or Lead		
Resolution		0.01			0.01		
Accuracy		1%F.S.			1%F.S.		
TEST MODE							
UPS Efficient Measurement		Non-Linear Mode			Non-Linear Mode		
Operating Frequency		Auto ; 40~440Hz			Auto ; 40~440Hz		
Current Range		0~18.75A	0~28A	0~37.5A	0~18.75A	0~28A	0~37.5A
PF Range		0~1			0~1		
Measuring Efficiency For PV Systems, Power Conditioners for THD 80%		Resistive + Non-Linear Mode			Resistive + Non-Linear Mode		
Operating Frequency		Auto ; 40~440Hz			Auto ; 40~440Hz		
Current Range		0~18.75A	0~28A	0~37.5A	0~18.75A	0~28A	0~37.5A
Resistive Range		3.2 ohm ~ 64K ohm	2.0 ohm ~ 40K ohm	1.6 ohm ~ 32K ohm	3.2 ohm ~ 64K ohm	2.0 ohm ~ 40K ohm	1.6 ohm ~ 32K ohm
UPS Back-Up Function(CC,LIN,CR,CP)							
UVP (VTH)		50~350Vrms / 500Vdc			50~425Vrms / 600Vdc		
UPS Back-Up Time		1~99999 Sec. (>27H)			1~99999 Sec. (>27H)		
Battery Discharge Function(CC,LIN,CR,CP)							
UVP (VTH)		50~350Vrms / 500Vdc			50~425Vrms / 600Vdc		
Battery Discharge Time		1~99999 Sec. (>27H)			1~99999 Sec. (>27H)		
UPS Transfer Time							
Current Range		0~18.75A	0~28A	0~37.5A	0~18.75A	0~28A	0~37.5A
UVP (VTH)		2.5V			2.5V		
Time Range		0.15mS~999.99mS			0.15mS~999.99mS		
Fuse Test Mode							
Max. Current	Turbo OFF	18.75Arms	28.0Arms	37.5Arms	18.75Arms	28.0Arms	37.5Arms
	Turbo ON	37.5Arms (x2) *3	56.0Arms (x2) *3	75.0Arms (x2) *3	37.5Arms (x2) *3	56.0Arms (x2) *3	75.0Arms (x2) *3
Trip & Non-Trip Time	Turbo OFF	0.1~9999.9sec.			0.1~9999.9sec.		
	Turbo ON	0.1~1.0sec.			0.1~1.0sec.		
Meas. Accuracy		±0.003 Sec.			±0.003 Sec.		
Repeat Cycle		0~255			0~255		
Short/OPP/OCP Test Function							
Short Time	Turbo OFF	0.1S ~ 10Sec. Or Cont.			0.1S ~ 10Sec. Or Cont.		
	Turbo ON	0.1S ~ 1Sec			0.1S ~ 1Sec		
OPP/OCP Step Time	Turbo OFF	100ms			100ms		
	Turbo ON	100ms, up to 10 Steps			100ms, up to 10 Steps		
OCP Istop	Turbo OFF	18.75Arms	28.0Arms	37.5Arms	18.75Arms	28.0Arms	37.5Arms
	Turbo ON	37.5Arms	56.0Arms	75.0Arms	37.5Arms	56.0Arms	75.0Arms
OPP Pstop	Turbo OFF	1875W	2800W	3750W	1875W	2800W	3750W
	Turbo ON	3750W	5600W	7500W	3750W	5600W	7500W
Programmable Inrush Current Simulation: Istart - Istop / Tsep							
Istart, Inrush Start Current		0~37.5A	0~56A	0~75A	0~37.5A	0~56A	0~75A
Inrush Step Time		0.1mS~100mS			0.1mS~100mS		
Istop, Inrush Stop Current		0~18.75A	0~28A	0~37.5A	0~18.75A	0~28A	0~37.5A
Programmable Surge Current Simulation: S1/T1 - S2/T2 - S3/T3							
S1 and S2 Current		0~37.5A	0~56A	0~75A	0~37.5A	0~56A	0~75A
T1 and T2 Time		0.01S~0.5Sec.			0.01S~0.5Sec.		
S3 Current		0~18.75A	0~28A	0~37.5A	0~18.75A	0~28A	0~37.5A
T3 Time		0.01S ~ 9.99Sec. Or Cont.			0.01S ~ 9.99Sec. Or Cont.		
MEASUREMENTS							
VOLTAGE READBACK V METER							
Range		500V			600V		
Resolution		0.01V			0.01V		
Accuracy		±0.05% of (reading + range)			±0.05% of (reading + range)		
Parameter		Vrms,V Max/Min,+/-Vpk			Vrms,V Max/Min,+/-Vpk		
CURRENT READBACK A METER							
Range		9.375Arms/18.75Arms	14Arms/28Arms	18.75Arms/37.5Arms	9.375Arms/18.75Arms	14Arms/28Arms	18.75Arms/37.5Arms
Resolution		0.2mA/0.4mA	0.3mA/0.6mA	0.4mA/0.8mA	0.2mA/0.4mA	0.3mA/0.6mA	0.4mA/0.8mA
Accuracy		±0.05% of (reading + range) @ 50/60Hz			±0.05% of (reading + range) @ 50/60Hz		
Parameter		Irms,I Max/Min,+/-Ipk			Irms,I Max/Min,+/-Ipk		
WATT READBACK W METER							
Range		1875W	2800W	3750W	1875W	2800W	3750W
Resolution		0.03125W	0.05W	0.0625W	0.03125W	0.05W	0.0625W
Accuracy		±0.1% of (reading + range)			±0.1% of (reading + range)		
VA METER		Vrms×Arms Correspond To Vrms and Arms			Vrms×Arms Correspond To Vrms and Arms		
POWER FACTOR METER							
Range		+/- 0.000~1.000			+/- 0.000~1.000		
Accuracy		±(0.002±(0.001/PF)*F)			±(0.002±(0.001/PF)*F)		
Frequency METER(V)							
Range		DC,40~440Hz			DC,40~440Hz		
Accuracy		0.1%			0.1%		
Other Parameter METER							
VA, VAR, CF_I, Ipeak, Imax., Imin. Vmax., Vmin., IHD, VHD, ITHD, VTHD							
OTHERS							
Start up Loading		Yes , Power on loading during Inverter / UPS start up			Yes , Power on loading during Inverter / UPS start up		
Load ON / OFF Angle		0 ~ 359 degree can be programmed for the angle of load ON and load OFF loading			0 ~ 359 degree can be programmed for the angle of load ON and load OFF loading		
Half Cycle and SCR/TRIAC Loading		Postive or Negative half cycle, 90˚ Trailing edge or Leading edge current waveform can be programmed			Postive or Negative half cycle, 90˚ Trailing edge or Leading edge current waveform can be programmed		
Master/Slave (3 Phase or Parallel Application)		Yes, 1 master and upto 7 slave units			Yes, 1 master and upto 7 slave units		
External Programming Input (OPTION)		F.S / 10Vdc, Resulotion 0.1V			F.S / 10Vdc, Resulotion 0.1V		
External SYNC Input		TTL			TTL		
Vmonitor (Isolated)		±500V / ±10V			±600V / ±10V		
Imonitor (Isolated)		±56.25Apk / ±10Vpk	±84Apk / ±10Vpk	±112.5Apk / ±10Vpk	±56.25Apk / ±10Vpk	±84Apk / ±10Vpk	±112.5Apk / ±10Vpk
Interface (OPTION)		GPIB ; RS-232 ; LAN ; USB			GPIB ; RS-232 ; LAN ; USB		
MAX. Power Consumption		150VA			150VA		
Operation Temperature *2		0 ~ 40 ˚C			0 ~ 40 ˚C		
Current of Input Impedance(mA)@50/60Hz ; @ 400Hz		–V*0.3 ; –V*2.2	–V*0.45 ; –V*3.3	–V*0.6 ; –V*4.4	–V*0.3 ; –V*2.2	–V*0.45 ; –V*3.3	–V*0.6 ; –V*4.4
Dimension(H x W x D)		177 x 440 x 558 mm	177 x 440 x 558mm	177 x 440 x 558 mm	177 x 440 x 558 mm	177 x 440 x 558mm	177 x 440 x 558 mm
Weight		21.5Kg	27.5Kg	33.5Kg	21.5Kg	27.5Kg	33.5Kg

*1 ms (millisiemens) is the unit of conductance(G), one siemens equal to 1/Ω
*2 Operating temperature range is 0~40˚C, all specification apply for 25˚C±5˚C, Except as noted
*3 Turbo mode for up to 2X Current rating & Power rating support Fuse, Short/OCP/OPP test function

* All specifications apply for 50/60Hz.
* All specifications subject to change without notice.

AC & DC Electronic Load

SPECIFICATIONS

MODEL		AEL-5006-350-56	AEL-5008-350-75	AEL-5012-350-112.5	AEL-5015-350-112.5	AEL-5019-350-112.5	AEL-5023-350-112.5
Power (W)		5600 W	7500 W	11250W	15000 W	18750W	22500W
Current(Ampere)		56 Arms / 168Apeak	75 Arms / 225Apeak	112.5 Arms / 337.5Apeak	112.5 Arms / 337.5Apeak	112.5 Arms / 337.5Apeak	112.5 Arms / 337.5Apeak
Voltage(Volt)		50~350Vrms / 500Vdc					
FREQUENCY Range		DC,40~440Hz(CC,CP Mode) , DC~440Hz(LIN,CR,CV Mode)					
PROTECTIONS							
Over Power Protection		≒ 5880Wrms or Programmable	≒ 7875Wrms or Programmable	≒11812.5Wrms or Programmable	≒11812.5Wrms or Programmable	≒19687.5Wrms or Programmable	≒23625Wrms or Programmable
Over Current Protection		≒ 58.8 Arms, or Programmable	≒ 78.75 Arms, or Programmable	≒ 118.125 Arms or Programmable	≒ 118.125 Arms or Programmable	≒ 118.125 Arms or Programmable	≒ 118.125 Arms or Programmable
Over Vlotage Protection		≒ 367.5 Vrms/525Vdc					
Over Temp. Protection		Yes					
OPERATION MODE							
Constant Current Mode for Sine-Wave							
Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Resolution		1mA/16bits	1.25mA/16bits	1.875mA/16bits	1.875mA/16bits	1.875mA/16bits	1.875mA/16bits
Accuracy		± (0.1% of setting + 0.2% of range) @ 50/60Hz					
Linear Constant Current Mode for Sine-Wave, Square-Wave or Quasi-Square Wave, PWM Wave							
Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Resolution		1mA/16bits	1.25mA/16bits	1.875mA/16bits	1.875mA/16bits	1.875mA/16bits	1.875mA/16bits
Accuracy		± (0.1% of setting + 0.2% of range) @ 50/60Hz					
Constant Resistance Mode							
Range		1 ohm ~ 20K ohm	0.8 ohm ~ 16K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm
Resolution*1		0.016666mS/16bits	0.020832mS/16bits	0.031248mS/16bits	0.031248mS/16bits	0.031248mS/16bits	0.031248mS/16bits
Accuracy		±0.2% of (setting + range) @ 50/60Hz					
Constant Voltage Mode							
Range		50~350Vrms / 500Vdc					
Resolution		0.1V					
Accuracy		±0.2% of (setting + range) @ 50/60Hz					
Constant Power Mode							
Range		5600W	7500W	11250W	15000 W	18750W	22500W
Resolution		0.1W	0.1W	1W	1W	1W	1W
Accuracy		±0.2% of (setting + range) @ 50/60Hz					
CREST FACTOR (CC & CP MODE ONLY)							
Range		√2~5					
Resolution		0.1					
Accuracy		(0.5% / Irms) + 1%F.S.					
POWER FACTOR (CC & CP MODE ONLY)							
Range		0~1 Lag or Lead					
Resolution		0.01					
Accuracy		1%F.S.					
TEST MODE							
UPS Efficient Measurement		Non-Linear Mode					
Operating Frequency		Auto ; 40~440Hz					
Current Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
PF Range		0~1					
Measuring Efficiency For PV Systems, Power Conditioners for THD 80%		Resistive + Non-Linear Mode					
Operating Frequency		Auto ; 40~440Hz					
Current Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Resistive Range		1 ohm ~ 20K ohm	0.8 ohm ~ 16K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm
UPS Back-Up Function(CC,LIN,CR,CP)							
UVP (VTH)		50~350Vrms / 500Vdc					
UPS Back-Up Time		1~99999 Sec. (>27H)					
Battery Discharge Function(CC,LIN,CR,CP)							
UVP (VTH)		50~350Vrms / 500Vdc					
Battery Discharge Time		1~99999 Sec. (>27H)					
UPS Transfer Time							
Current Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
UVP (VTH)		2.5V					
Time range		0.15mS~999.99mS					
Fuse Test Mode							
Max. Current	Turbo OFF	75Arms	75Arms	112.5Arms	112.5Arms	112.5Arms	112.5Arms
	Turbo ON	150Arms (x2) *3	150Arms (x2) *3	225Arms (x2) *3	225Arms (x2) *3	225Arms (x2) *3	225Arms (x2) *3
Trip & Non-Trip Time	Turbo OFF	0.1~9999.9sec.					
	Turbo ON	0.1~1.0sec.					
Meas. Accuracy		±0.003 Sec.					
Repeat Cycle		0~255					
Short/OPP/OCP Test Function							
Short Time	Turbo OFF	0.1S ~ 10Sec. Or Cont.					
	Turbo ON	0.1S ~ 1Sec					
OPP/OCP Step Time	Turbo OFF	100ms					
	Turbo ON	100ms, up to 10 Steps					
OCP Istop	Turbo OFF	56Arms	75Arms	112.5Arms	112.5Arms	112.5Arms	112.5Arms
	Turbo ON	112Arms	150Arms	225Arms	225Arms	225Arms	225Arms
OPP Pstop	Turbo OFF	5600W	7500W	11250W	15000W	18750W	22500W
	Turbo ON	11200W	15000W	22500W	30000W	37500W	45000W
Programmable Inrush Current Simulation: Istart - Istop / Tsep							
Istart, Inrush Start Current		0~112A	0~150A	0~225A	0~225A	0~225A	0~225A
Inrush Step Time		0.1mS~100mS					
Istop, Inrush Stop Current		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Programmable Surge Current Simulation: S1/T1 - S2/T2 - S3/T3							
S1 and S2 Current		0~112A	0~150A	0~225A	0~225A	0~225A	0~225A
T1 and T2 Time		0.01S~0.5Sec.					
S3 Current		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
T3 Time		0.01S ~ 9.99Sec. Or Cont.					
MEASUREMENTS							
VOLTAGE READBACK A METER							
Range		500V					
Resolution		0.01V					
Accuracy		±0.05% of (reading + range)					
Parameter		Vrms,V Max/Min,+/-Vpk					
CURRENT READBACK A METER							
Range		28Arms/56Arms	37.5Arms/75Arms	56.25Arms/112.5Arms	56.25Arms/112.5Arms	56.25Arms/112.5Arms	56.25Arms/112.5Arms
Resolution		0.6mA/1.2mA	0.8mA/1.6mA	1.2mA/2.4mA	1.2mA/2.4mA	1.2mA/2.4mA	1.2mA/2.4mA
Accuracy		±0.1% of (reading + range) @ 50/60Hz					
Parameter		Irms,I Max/Min,+/-Ipk					
WATT READBACK W METER							
Range		5600W	7500W	11250W	15000W	18750W	22500W
Resolution		0.1W	0.125W	0.1875W	0.25W	0.3125W	0.375W
Accuracy		±0.2% of (reading + range) @ 50/60Hz , ±0.4% of (reading + range)					
VA METER		Vrms×Arms Correspond To Vrms and Arms					
Power Factor METER							
Range		+/- 0.000~1.000					
Accuracy		±(0.002±(0.001/PF)*F)					
Frequency METER(V)							
Range		DC,40~440Hz					
Accuracy		0.1%					
Other Parameter METER							
VA, VAR, CF_I, Ipeak, Imax., Imin. Vmax., Vmin., IHD, VHD, ITHD, VTHD							
OTHERS							
Start up Loading		Yes , Power on loading during Inverter / UPS start up					
Load ON / OFF Angle		0 ~ 359 degree can be programmed for the angle of load ON and load OFF loading					
Half Cycle and SCR/TRIAC Loading		Postive or Negative half cycle, 90° Trailing edge or Leading edge current waveform can be programmed					
Master/Slave (3 Phase or Parallel Application)		Yes, 1 master and upto 7 slave unit					
External Programming Input (OPTION)		F.S / 10Vdc, Resulotion 0.1V					
External SYNC Input		TTL					
Vmonitor (Isolated)		±500V / ±10V					
Imonitor (Isolated)		±168Apk / ±10Vpk	±225Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk
Interface (OPTION)		GPIB ; RS-232 ; LAN ; USB					
MAX. Power Consumption		270VA	270VA	390VA	510VA	630VA	750VA
Operation Temperature *2		0 ~ 40 ℃					
Current of Input Impedance(mA)@50/60Hz ; @ 400Hz		~V*0.9 ; ~V*6.6	~V*1.2 ; ~V*8.8	~V*1.8 ; ~V*13.2	~V*2.4 ; ~V*17.6	~V*3.0 ; ~V*22	~V*3.6 ; ~V*26.4
Dimension(H x W x D)		458 x 480 x 590 mm	458 x 480 x 590 mm	636 x 480 x 590 mm	814 x 480 x 590 mm	1283 x 600 x 600 mm	1283 x 600 x 600 mm
Weight		58 kg	70 kg	105kg	140kg	260kg	295kg

*1 ms (millisiemens) is the unit of conductance(G), one siemens equal to 1/Ω

*2 Operating temperature range is 0~40℃, all specification apply for 25℃±5℃, Except as noted

*3 Turbo mode for up to 2X Current rating & Power rating support Fuse, Short/OCP/OPP test function

* All specifications apply for 50/60Hz.

* All specifications subject to change without notice.

AC & DC Electronic Load

SPECIFICATIONS

MODEL		AEL-5006-425-56	AEL-5008-425-75	AEL-5012-425-112.5	AEL-5015-425-112.5	AEL-5019-425-112.5	AEL-5023-425-112.5
Power (W)		5600 W	7500 W	11250W	15000 W	18750W	22500W
Current(Ampere)		56 Arms / 168Apeak	75 Arms / 225Apeak	112.5 Arms / 337.5Apeak	112.5 Arms / 337.5Apeak	112.5 Arms / 337.5Apeak	112.5 Arms / 337.5Apeak
Voltage(Volt)		50~425Vrms / 600Vdc					
FREQUENCY Range		DC,40~440Hz(CC,CP Mode) , DC~440Hz(LIN,CR,CV Mode)					
PROTECTIONS							
Over Power Protection		≒ 5880Wrms or Programmable	≒ 7875Wrms or Programmable	≒11812.5Wrms or Programmable	≒15750Wrms or Programmable	≒19687.5Wrms or Programmable	≒23625Wrms or Programmable
Over Current Protection		≒ 58.8 Arms, or Programmable	≒ 78.75 Arms, or Programmable	≒ 118.125 Arms or Programmable	≒ 118.125 Arms or Programmable	≒ 118.125 Arms or Programmable	≒ 118.125 Arms or Programmable
Over Vlotage Protection		≒ 446.25 Vrms/630Vdc					
Over Temp. Protection		Yes					
OPERATION MODE							
Constant Current Mode for Sine-Wave							
Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Resolution		1mA/16bits	1.25mA/16bits	1.875mA/16bits	1.875mA/16bits	1.875mA/16bits	1.875mA/16bits
Accuracy		± (0.1% of setting + 0.2% of range) @ 50/60Hz					
Linear Constant Current Mode for Sine-Wave, Square-Wave or Quasi-Square Wave, PWM Wave							
Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Resolution		1mA/16bits	1.25mA/16bits	1.875mA/16bits	1.875mA/16bits	1.875mA/16bits	1.875mA/16bits
Accuracy		± (0.1% of setting + 0.2% of range) @ 50/60Hz					
Constant Resistance Mode							
Range		1 ohm ~ 20K ohm	0.8 ohm ~ 16K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm
Resolution*1		0.016666mS/16bits	0.020832mS/16bits	0.031248mS/16bits	0.031248mS/16bits	0.031248mS/16bits	0.031248mS/16bits
Accuracy		±0.2% of (setting + range) @ 50/60Hz					
Constant Voltage Mode							
Range		50~425Vrms / 600Vdc					
Resolution		0.1V					
Accuracy		±0.2% of (setting + range) @ 50/60Hz					
Constant Power Mode							
Range		5600W	7500W	11250W	15000 W	18750W	22500W
Resolution		0.1W	0.1W	1W	1W	1W	1W
Accuracy		±0.2% of (setting + range) @ 50/60Hz					
CREST FACTOR (CC & CP MODE ONLY)							
Range		√2~5					
Resolution		0.1					
Accuracy		(0.5% / Irms) + 1%F.S.					
POWER FACTOR (CC & CP MODE ONLY)							
Range		0~1 Lag or Lead					
Resolution		0.01					
Accuracy		1%F.S.					
TEST MODE							
UPS Efficient Measurement		Non-Linear Mode					
Operating Frequency		Auto ; 40~440Hz					
Current Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
PF Range		0~1					
Measuring Efficiency For PV Systems, Power Conditioners for THD 80%		Resistive + Non-Linear Mode					
Operating Frequency		Auto ; 40~440Hz					
Current Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Resistive Range		1 ohm ~ 20K ohm	0.8 ohm ~ 16K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm
UPS Back-Up Function(CC,LIN,CR,CP)							
UVP (VTH)		50~425Vrms / 600Vdc					
UPS Back-Up Time		1~99999 Sec. (>27H)					
Battery Discharge Function(CC,LIN,CR,CP)							
UVP (VTH)		50~425Vrms / 600Vdc					
Battery Discharge Time		1~99999 Sec. (>27H)					
UPS Transfer Time							
Current Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
UVP (VTH)		2.5V					
Time range		0.15mS~999.99mS					
Fuse Test Mode							
Max. Current	Turbo OFF	75Arms	75Arms	112.5Arms	112.5Arms	112.5Arms	112.5Arms
	Turbo ON	150Arms (x2) *3	150Arms (x2) *3	225Arms (x2) *3	225Arms (x2) *3	225Arms (x2) *3	225Arms (x2) *3
Trip & Non-Trip Time	Turbo OFF	0.1~9999.9sec.					
	Turbo ON	0.1~1.0sec.					
Meas. Accuracy		±0.003 Sec.					
Repeat Cycle		0~255					
Short/OPP/OCP Test Function							
Short Time	Turbo OFF	0.1S ~ 10Sec. Or Cont.					
	Turbo ON	0.1S ~ 1Sec					
OPP/OCP Step Time	Turbo OFF	100ms					
	Turbo ON	100ms, up to 10 Steps					
OCP Istop	Turbo OFF	56Arms	75Arms	112.5Arms	112.5Arms	112.5Arms	112.5Arms
	Turbo ON	112Arms	150Arms	225Arms	225Arms	225Arms	225Arms
OPP Pstop	Turbo OFF	5600W	7500W	11250W	15000W	18750W	22500W
	Turbo ON	11200W	15000W	22500W	30000W	37500W	45000W
Programmable Inrush Current Simulation: Istart - Istop / Tsep							
Istart, Inrush Start Current		0~112A	0~150A	0~225A	0~225A	0~225A	0~225A
Inrush Step Time		0.1mS~100mS					
Istop, Inrush Stop Current		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Programmable Surge Current Simulation: S1/T1 - S2/T2 - S3/T3							
S1 and S2 Current		0~112A	0~150A	0~225A	0~225A	0~225A	0~225A
T1 and T2 Time		0.01S~0.5Sec.					
S3 Current		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
T3 Time		0.01S ~ 9.99Sec. Or Cont.					
MEASUREMENTS							
VOLTAGE READBACK A METER							
Range		600V					
Resolution		0.01V					
Accuracy		±0.05% of (reading + range)					
Parameter		Vrms,V Max/Min,+/-Vpk					
CURRENT READBACK A METER							
Range		28Arms/56Arms	37.5Arms/75Arms	56.25Arms/112.5Arms	56.25Arms/112.5Arms	56.25Arms/112.5Arms	56.25Arms/112.5Arms
Resolution		0.6mA/1.2mA	0.8mA/1.6mA	1.2mA/2.4mA	1.2mA/2.4mA	1.2mA/2.4mA	1.2mA/2.4mA
Accuracy		±0.1% of (reading + range) @ 50/60Hz					
Parameter		Irms,I Max/Min,+/-Ipk					
WATT READBACK W METER							
Range		5600W	7500W	11250W	15000W	18750W	22500W
Resolution		0.1W	0.125W	0.1875W	0.25W	0.3125W	0.375W
Accuracy		±0.2% of (reading + range) @ 50/60Hz , ±0.4% of (reading + range)					
VA METER		Vrms×Arms Correspond To Vrms and Arms					
Power Factor METER							
Range		+/- 0.000~1.000					
Accuracy		±(0.002±(0.001/PF)*F)					
Frequency METER(V)							
Range		DC,40~440Hz					
Accuracy		0.1%					
Other Parameter METER							
		VA, VAR, CF_I, Ipeak, Imax., Imin. Vmax., Vmin., IHD, VHD, ITHD, VTHD					
OTHERS							
Start up Loading		Yes , Power on loading during Inverter / UPS start up					
Load ON / OFF Angle		0 ~ 359 degree can be programmed for the angle of load ON and load OFF loading					
Half Cycle and SCR/TRIAC Loading		Postive or Negative half cycle, 90° Trailing edge or Leading edge current waveform can be programmed					
Master/Slave (3 Phase or Parallel Application)		Yes, 1 master and upto 7 slave unit					
External Programming Input (OPTION)		F.S / 10Vdc, Resulotion 0.1V					
External SYNC Input		TTL					
Vmonitor (Isolated)		±600V / ±10V					
Imonitor (Isolated)		±168Apk / ±10Vpk	±225Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk
Interface (OPTION)		GPIB ; RS-232 ; LAN ; USB					
MAX. Power Consumption		270VA	270VA	390VA	510VA	630VA	750VA
Operation Temperature *2		0 ~ 40 ℃					
Current of Input Impedance(mA)@50/60Hz ; @ 400Hz		–V*0.9 ; –V*6.6	–V*1.2 ; –V*8.8	–V*1.8 ; –V*13.2	–V*2.4 ; –V*17.6	–V*3.0 ; –V*22	–V*3.6 ; –V*26.4
Dimension(H x W x D)		458 x 480 x 590 mm	458 x 480 x 590 mm	636 x 480 x 590 mm	814 x 480 x 590 mm	1283 x 600 x 600 mm	1283 x 600 x 600 mm
Weight		58 kg	70 kg	105kg	140kg	260kg	295kg

*1 ms (millisiemens) is the unit of conductance(G), one siemens equal to 1/Ω
*2 Operating temperature range is 0~40℃, all specification apply for 25℃±5℃, Except as noted
*3 Turbo mode for up to 2X Current rating & Power rating support Fuse, Short/OCP/OPP test function

* All specifications apply for 50/60Hz.
* All specifications subject to change without notice.

AC & DC Electronic Load

SPECIFICATIONS

MODEL		AEL-5003-480-18.75	AEL-5004-480-28
Power (W)		2800W	3750 W
Current(Ampere)		18.75 Arms / 56.25Apeak	28 Arms / 84Apeak
Voltage(Volt)		50~480Vrms / 700Vdc	
FREQUENCY Range		DC,40~70Hz(CC,CP Mode) , DC~70Hz(LIN,CR,CV Mode)	
PROTECTIONS			
Over Power Protection		≒2940Wrms or Programmable	≒ 3937.5Wrms or Programmable
Over Current Protection		≒ 19.687 Arms or Programmable	≒ 29.4 Arms or Programmable
Over Vlotage Protection		≒ 504Vrms / 735Vdc	
Over Temp. Protection		Yes	
OPERATION MODE			
Constant Current Mode for Sine-Wave			
Range		0~18.75A	0~28A
Resolution		0.3125mA/16bits	0.5mA/16bits
Accuracy		± (0.1% of setting + 0.2% of range) @ 50/60Hz	
Linear Constant Current Mode for Sine-Wave, Square-Wave or Quasi-Square Wave, PWM Wave			
Range		0~18.75A	0~28A
Resolution		0.3125mA/16bits	0.5mA/16bits
Accuracy		± (0.1% of setting + 0.2% of range) @ 50/60Hz	
Constant Resistance Mode			
Range		4 ohm ~ 80K ohm	2.5 ohm ~ 50K ohm
Resolution*1		0.004166mS/16bits	0.006666mS/16bits
Accuracy		±0.2% of (setting + range) @ 50/60Hz	
Constant Voltage Mode			
Range		50~480Vrms / 700Vdc	
Resolution		0.0125V	
Accuracy		±(0.1% of setting + 0.1% of range)	
Constant Power Mode			
Range		2800W	3750W
Resolution		0.1W	0.1W
Accuracy		±(0.1% of setting + 0.1% of range)	
CREST FACTOR (CC & CP MODE ONLY)			
Range		√2~5	
Resolution		0.1	
Accuracy		(0.5% / Irms) + 1%F.S.	
POWER FACTOR (CC & CP MODE ONLY)			
Range		0~1 Lag or Lead	
Resolution		0.01	
Accuracy		1%F.S.	
TEST MODE			
UPS Efficient Measurement		Non-Linear Mode	
Operating Frequency		Auto ; 40~70Hz	
Current Range		0~18.75A	0~28A
PF Range		0~1	
Measuring Efficiency For PV Systems, Power Conditioners for THD 80%		Resistive + Non-Linear Mode	
Operating Frequency		Auto ; 40~70Hz	
Current Range		0~18.75A	0~28A
Resistive Range		4 ohm ~ 80K ohm	2.5 ohm ~ 50K ohm
UPS Back-Up Function(CC,LIN,CR,CP)			
UVP (VTH)		50~480Vrms / 700Vdc	
UPS Back-Up Time		1~99999 Sec. (>27H)	
Battery Discharge Function(CC,LIN,CR,CP)			
UVP (VTH)		50~480Vrms / 700Vdc	
Battery Discharge Time		1~99999 Sec. (>27H)	
UPS Transfer Time			
Current Range		0~18.75A	0~28A
UVP (VTH)		2.5V	
Time range		0.15mS~999.99mS	
Fuse Test Mode			
Max. Current	Turbo OFF	18.75Arms	28.0Arms
	Turbo ON	37.5Arms (x2) *3	56.0Arms (x2) *3
Trip & Non-Trip Time	Turbo OFF	0.1~9999.9sec.	
	Turbo ON	0.1~1.0sec.	
Meas. Accuracy		±0.003 Sec.	
Repeat Cycle		0~255	
Short/OPP/OCP Test Function			
Short Time	Turbo OFF	0.1S ~ 10Sec. Or Cont.	
	Turbo ON	0.1S ~ 1Sec	
OPP/OCP Step Time	Turbo OFF	100ms	
	Turbo ON	100ms, up to 10 Steps	
OCP Istop	Turbo OFF	18.75Arms	28.0Arms
	Turbo ON	37.5Arms	56.0Arms
OPP Pstop	Turbo OFF	2800W	3750W
	Turbo ON	5600W	7500W
Programmable Inrush Current Simulation: Istart - Istop / Tsep			
Istart, Inrush Start Current		0~37.5A	0~56A
Inrush Step Time			
Istop, Inrush Stop Current		0~18.75A	0~28A
Programmable Surge Current Simulation: S1/T1 - S2/T2 - S3/T3			
S1 and S2 Current		0~37.5A	0~56A
T1 and T2 Time			
S3 Current		0~18.75A	0~28A
T3 Time			
MEASUREMENTS			
VOLTAGE READBACK V METER			
Range		700V	
Resolution		0.0125V	
Accuracy		±0.05% of (reading + range)	
Parameter		Vrms,V Max/Min,+/-Vpk	
CURRENT READBACK A METER			
Range		9.375Arms/18.75Arms	14Arms/28Arms
Resolution		0.2mA/0.4mA	0.3mA/0.6mA
Accuracy		±0.05% of (reading + range) @ 50/60Hz	
Parameter		Irms,I Max/Min,+/-Ipk	
WATT READBACK W METER			
Range		2800W	3750W
Resolution		0.05W	0.0625W
Accuracy		±0.1% of (reading + range)	
VA METER		Vrms×Arms Correspond To Vrms and Arms	
Power Factor METER			
Range		+/- 0.000~1.000	
Accuracy		±(0.002±(0.001/PF)*F)	
Frequency METER(V)			
Range		DC,40~70Hz	
Accuracy		0.1%	
Other Parameter METER			
VA, VAR, CF_I, Ipeak, Imax., Imin. Vmax., Vmin., IHD, VHD, ITHD, VTHD			
OTHERS			
Start up Loading		Yes , Power on loading during Inverter / UPS start up	
Load ON / OFF Angle		0 ~ 359 degree can be programmed for the angle of load ON and load OFF loading	
Half Cycle and SCR/TRIAC Loading		Postive or Negative half cycle, 90˚ Trailing edge or Leading edge current waveform can be programmed	
Master/Slave (3 Phase or Parallel Application)		Yes, 1 master and upto 7 slave units	
External Programming Input (OPTION)		F.S / 10Vdc, Resulotion 0.1V	
External SYNC Input		TTL	
Vmonitor (Isolated)		±700V / ±10V	
Imonitor (Isolated)		±56.25Apk / ±10Vpk	±84Apk / ±10Vpk
Interface (OPTION)		GPIB ; RS-232 ; LAN ; USB	
MAX. Power Consumption		150VA	
Operation Temperature *2		0 ~ 40 ˚C	
Current of Input Impedance(mA)@50/60Hz ; @ 400Hz		-V*0.3 ; -V*2.2	-V*0.4 ; -V*2.95
Dimension(H x W x D)		177 x 440 x 558 mm	177 x 440 x 558 mm
Weight		27.5Kg	33.5Kg

*1 ms (millisiemens) is the unit of conductance(G), one siemens equal to 1/Ω
*2 Operating temperature range is 0~40℃, all specification apply for 25℃±5℃, Except as noted
*3 Turbo mode for up to 2X Current rating & Power rating support Fuse, Short/OCP/OPP test function

* All specifications apply for 50/60Hz.
* All specifications subject to change without notice.