

### MU150HxxxAQ\_0-10V Series

### **General-Outdoor**



**■** Features

- · Input voltage: 90-305VAC
- · Built-in active PFC function: 0.99 Typ.
- · Low THD: 10% Typ. · High efficency: 93% Typ.
- · IP67 design for indoor or outdoor installations.
- · High surge immunity
- Support 0-10V / 10V PWM / VR dimming function and on/off function
- · Compliance to worldwide safety regulations for lighting.
- · Suitable for dry/damp locations.
- · 5 Years Warranty.

















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■ Specificat	ion														
	Model	005	0.45	050	070	405	4.40	475	040	0.45	000	045	250	400	500
(MU150AXXXAQ_0-10V)		035	045	053	070	105	140	175	210	245	280	315	350	420	500
Input	Efficency (Typ.)110VAC	90.0%	90.0%	90.0%	90.0%	89.0%	89.0%	89.0%	89.0%	89.0%	89.0%	88.0%	88.0%	88.0%	88.0%
	Efficency (Typ.)220VAC	93.0%	93.0%	93.0%	93.0%	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%	91.0%	91.0%	91.0%	91.0%
	Voltage Range (VAC)	90~305													
	Frequency Range (Hz)	47~63													
	Power Factor(Typ.)	0.99(Typcal), >0.90 at 100~277VAC input, 70%~100% load													
	THD/Tym \	<10% at 220VAC input 50Hz,70%~100% load,													
	THD(Typ.)	<15% at 110VAC and 277VAC input 60Hz, 70%~100% load,													
	AC Current(MAX.)		1.8A at 110VAC , 0.9A MAX at 220VAC												
	Inrush Current(MAX.)						65A (25	°C , at 230	OVAC , co	ld start)					
	Leakage Current(MAX.)		1mA at 277VAC 50Hz input												
	DC Voltage (V)	428	333	283	214	142	107	85	71	61	53	48	42	36	30
	Rated Current(mA)	350	450	530	700	1050	1400	1750	2100	2450	2800	3150	3500	4200	5000
	Rated Power (W)	149.8	149.9	150.0	149.8	149.1	149.8	148.8	149.1	149.5	148.4	151.2	147.0	151.2	150.0
	Ripple&Noise (Vp-p)	12.84	9.99	8.49	6.42	4.26	3.21	2.55	2.13	1.83	1.59	1.44	1.26	1.08	0.9
Outmut	Voltage ADJ. Range(V)	214~428	167~333	142~283	107~214	71~142	54~107	43~85	36~71	31~61	27~53	24~48	21~42	18~36	15~30
Output	Current Tolerance <sub>Note.1</sub>	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%
	Line Regulation	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%
I	Load Regulation	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%
	Setup, Rise Time				1.2s n	nax, meas	ured at 120	VAC input;	1s max,	measured	at 220VA	Cinput			
	Hold Up Time						10r	ns at 220V <i>F</i>	AC 100% I	oad					
	Over Voltage(V)(Typ.)	578	450	382	289	192	144	115	96	82	72	65	57	49	41
		Hiccup mode.The power supply shall be self-recovery when the fault is removed.													
Protection	Short Circuit				No dama	age , The p	ower supp	ly shall be	self-recove	ery when th	ne fault is	removed.			
	Over Temperature	Protection type : Decrease output current . When TC reaches 110±10°C , the output current decrease to 50% rate value until the TC													
	Over remperature		reaches 75±10°C												
	Working Temp.					-4	0~+70°C, r	efer to the o	derating cu	irve for de	tail				
	Working Humidity	5~100%RH, non-condensing													
Environment	Storage Temp., Humidity						-4	0~+85°C , 5	5%-100%F	RH					
	Temp. Coefficient							0.03%/℃ (	0~50°C )						
	Vibration							le, period fo							
	Safety Standard				UL875		,	A-C22.2No.			·	7-2-13			
Safety & EMC	Withstand Voltage					I/P-C	)/P:3.75K\	AC I/P-FG	:1.875KV	O/P-FG:1	.5KV				
	Isolation Resistance							P-FG:100M							
	EMC Emission							lass B , EN							
	EMC Immunity				EN6	1000-4-2,3	3,4,5,6,8,1	1 , EN6154	7 ( Surge	L,N-FG 6k	(V , L-N 4	KV)			
	MTBF	ļ		300,0	000 hours,	measured		d, 25°C amb			% Load ,N	ИIL-HDBK	-217F		
Others	Dimension						221	( 67.5 x 40 ı	mm (LxW	xH)					
	Weight							1.05	skg						

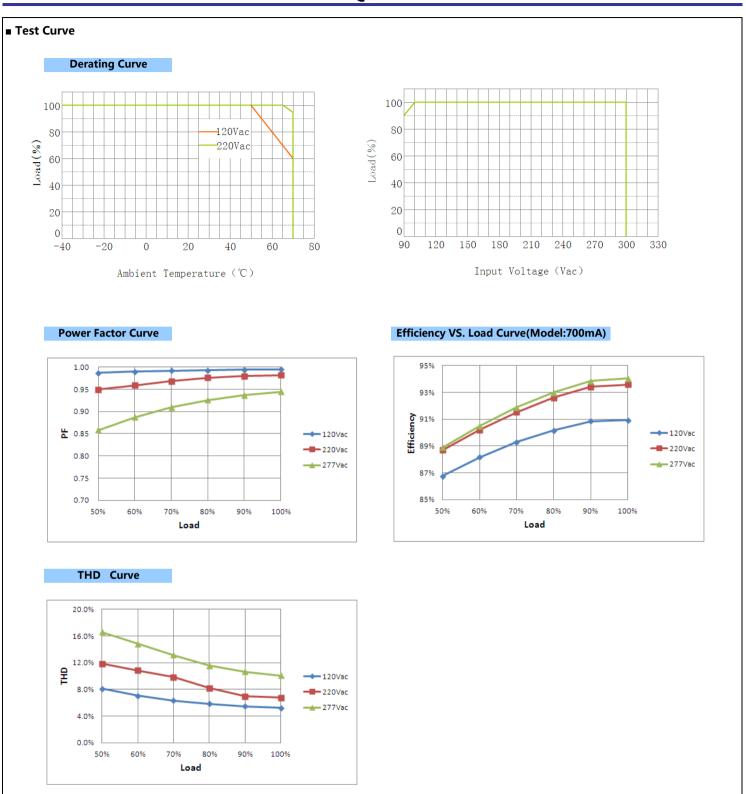
Note.1: Includes set up tolerance, line regulation and load regulation.

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**AKON CO., LTD.** 



# AHON MU150HxxxAQ\_0-10V Series General-Outdoor



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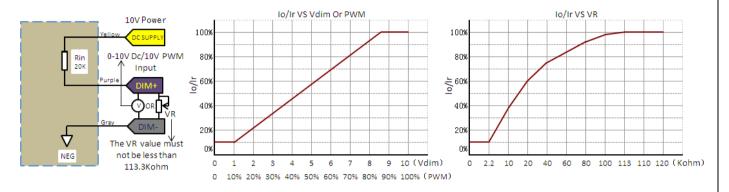
## MU150HxxxAQ\_0-10V Series General-Outdoor

#### Dimming function description:

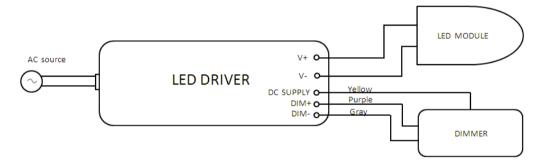
1. The dimmer control may be operated from an input signal of 0 - 10 Vdc / 10V PWM (Frequency range: 500Hz to 5KHz, Duty: 0-100%).

2. With one external variable resistor, the VR value must not be less than 113.3 Kohm.

#### Dimming module diagram and dimming cruve:



#### Dimming connection diagram:



#### Notes:

- 1.lo is actual output current with dimming control signal and Ir is rated output current.
- 2The dimming control signal can be operated output current from 100% to 10% Ir, output voltage must be maintained above 50% of the rated output voltage.
- 3.Do not connect dimming wire to the output; otherwise, the LED driver can not work normally.
- 4.The dimming signal is allowed to be less than 1V/10% PWM, the output current can be maintained 10% Ir. (about on/off function specification ,please contact MOONS for details).

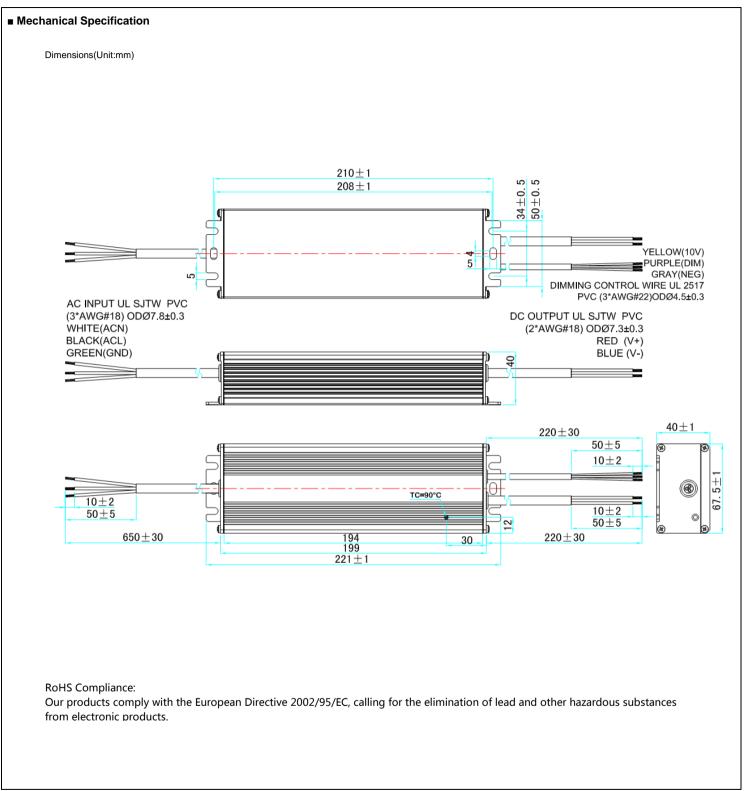
#### Dimming Control Module Parameter(On secondary side)

Parameter	Min.	Тур.	Max.	Notes
DC supply output voltage	10V	12V	14V	
DC supply output source current	0 mA	-	10 mA	
Absolute maximum voltage on the DIM+	-2V	-	12V	
Source current on the DIM+	0 mA	-	0.01 mA	
Value of Rin ( the resistor inside the LED driver	19.8k	20k	20.2k	
which locate between the DIM+ and the DC	19.0K	ZUK	20.2K	

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