

NGE18 series



MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

SPECIFICATION

ORDER NO.			NGE18○05-P1J	NGE18○09-P1J	NGE18○12-P1J	NGE18○15-P1J	NGE18○18-P1J	NGE18○24-P1J
			○ = I, U, E					
OUTPUT	DC VOLTAGE Note.2		5V	9V	12V	15V	18V	24V
	RATED CURRENT		3A	2A	1.5A	1.2A	1A	0.75A
	CURRENT RANGE		0 ~ 3A	0 ~ 2A	0 ~ 1.5A	0 ~ 1.2A	0 ~ 1A	0 ~ 0.75A
	RATED POWER		15W	18W	18W	18W	18W	18W
	RIPPLE & NOISE (max.) Note.3		60mVp-p	100mVp-p	120mVp-p	150mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.4		±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±3.0%
	LINE REGULATION Note.5		±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION Note.6		±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±3.0%
SETUP, RISE, HOLD UP TIME			1500ms, 30ms, 30ms / 230VAC 3000ms, 30ms, 10ms / 115VAC at full load					
INPUT	VOLTAGE RANGE Note.7		80 ~ 264VAC 113 ~ 370VDC					
	FREQUENCY RANGE		47 ~ 63Hz					
	EFFICIENCY (Typ.)		82%	87.5%	87%	87%	88%	88%
	AC CURRENT		0.4A / 115VAC 0.25A / 230VAC					
	INRUSH CURRENT (max.)		COLD START 40A / 115VAC 80A / 230VAC					
	LEAKAGE CURRENT (max.)		Touch current < 100uA (rms) @264VAC					
PROTECTION	OVERLOAD		110% ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE		115% ~ 140% rated output voltage Protection type : Clamp by zener diode					
ENVIRONMENT	WORKING TEMP.		-30 ~ +70℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY		20% ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY		-20 ~ +85℃, 10 ~ 95% RH non-condensing					
	TEMP. COEFFICIENT		±0.03% / °C (0 ~ 45℃)					
	VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC (Note. 8)	SAFETY STANDARDS		CB IEC62368-1, IEC60601-1/-1-11, IEC61558-1/-2-16, IEC60335-1; UL UL62368-1, CSA C22.2 NO. 62368-1, ANSI/AAMI ES60601-1/-1-11(3.2 Version), CAN/CSA-C22.2 NO.60601-1/-1-11; ANSI/AAMI ES60601-1-11, CAN/CSA-C22.2 NO.60601-1-11(for U Type only) DEKRA BS EN/EN62368-1, BS EN/EN60601-1/-1-11, BS EN/EN61558-1/-2-16, BS EN/EN60335-1; PSE J62368-1; BSMI CNS15598-1; RCM AS/NZS 61558-1/-2-16; EAC TPTC004; CCC GB4943.1 approved. (Please refer to next page for more details)					
	WITHSTAND VOLTAGE		I/P-O/P:4000VAC					
	ISOLATION RESISTANCE		I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH					
	EMC EMISSION		Parameter		Standard		Test Level / Note	
			Conducted emission		BS EN/EN55032(CISPR32)/EN55011 , FCC Part15 , CNS15936, GB/T 9254.1-2021		Class B	
			Radiated emission		BS EN/EN55032(CISPR32)/EN55011 , FCC Part15 , CNS15936, GB/T 9254.1-2021		Class B	
			Harmonic current		BS EN/EN61000-3-2		Class A	
	EMC IMMUNITY		Parameter		Standard		Test Level /Note	
			ESD		BS EN/EN61000-4-2		Level 3, 15KV air; Level 2, 8KV contact	
			RF field susceptibility		BS EN/EN61000-4-3		Level 2, 3V/m	
			EFT bursts		BS EN/EN61000-4-4		Level 3, 2KV	
			Surge susceptibility		BS EN/EN61000-4-5		Level 3, 1KV/L-N	
			Conducted susceptibility		BS EN/EN61000-4-6		Level 2, 3V	
			Magnetic field immunity		BS EN/EN61000-4-8		Level 1, 1A/m	
	Voltage dips , interruption		BS EN/EN61000-4-11		>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods			
	OTHERS	MTBF		1272.8 Khrs min. MIL-HDBK-217F (25℃) 7192.4 Khrs min. Telcordia TR/SR-332(Bellcore) (25℃)				
DIMENSION		48*28*55mm (L*W*H)						
PACKING		MAIN BODY	112g; 96pcs/ 12.6Kg / 1.02CUFT for NGE18lxx/Uxx-P1J				127g; 72pcs/ 11.2Kg / 1.36CUFT for NGE18Exx-P1J	
		AC PLUGS	Refer to Page 3					
DC OUTPUT CONNECTOR	PLUG		See page 6~7 ; Other type available by customer requested					
	CABLE		See page 6~7 ; Other type available by customer requested					
NOTE			1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1 μ F & 47 μ F capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 0% to 100% rated load 7.Derating may be needed under low input voltage. Please check the derating curve for more details. 8.The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf) 9.Design meet US DoE Level VII (from Docket number EERE-2020-BT-STD-0006). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx					

■ Interchangeable AC Plug Specifically for NGE12/18/30/45/65/90 (I-Type)

Order NO.	NGE18Ixx-P1J (Universal Version) 					NGE18Exx-P1J (EU Version) 	NGE18Uxx-P1J (US Version) 
AC plug	Interchangeable Type (Unfoldable; AC Pin fixed)					Non-Interchangeable Type	
	EU 	US 	UK 	AU 	CN 	Unfoldable AC Pin	Foldable AC Pin
Certificate							

■ AC Plugs Accessory (Sold Separately)

MW's order NO.	Per Unit	Per Bag	Per Carton	
		Q'Ty	Q'Ty	G.W.
AC PLUG-EU4		30 pcs	300 pcs (10 bags)	5.6Kg
AC PLUG-US4		30 pcs	300 pcs (10 bags)	5.3Kg
AC PLUG-UK4		30 pcs	300 pcs (10 bags)	7.1Kg
AC PLUG-AU4		30 pcs	300 pcs (10 bags)	5.3Kg
AC PLUG-CN4		30 pcs	300 pcs (10 bags)	5.3Kg
AC PLUG-MIX4	     (Per Set)	30 pcs (5 Types*6 mixed bags)	300 pcs (5 Types*6 mixed bags) (10 bags)	5.78Kg

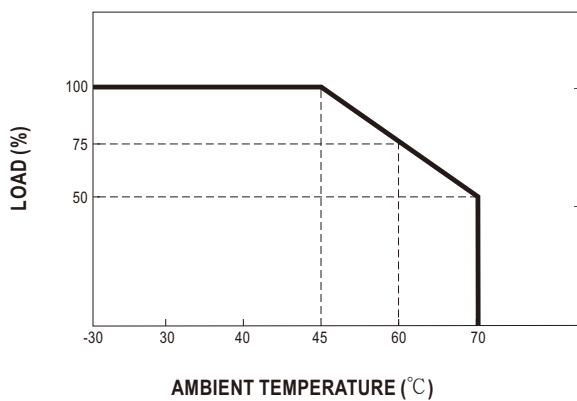
■ Interchangeable AC Plug Installation Steps (Convertible with I Type only)

Step1	Step2
	
Slide in AC converter along the guided rail between the metal prongs until it is locked in (with a “click” sound).	Check if the new plug type is stable and correct before use.

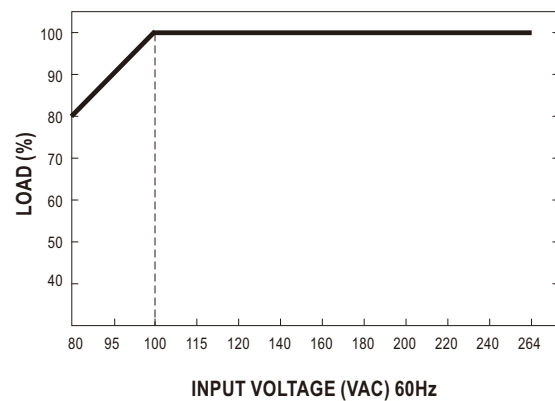
Note:

1. NGE18I main body unit and AC inlet plug should be ordered separately.
2. NGE18I needs to be used along with one of the AC inlet plug (EU,US,UK,AU,CN).

■ Derating Curve



■ Static Characteristics

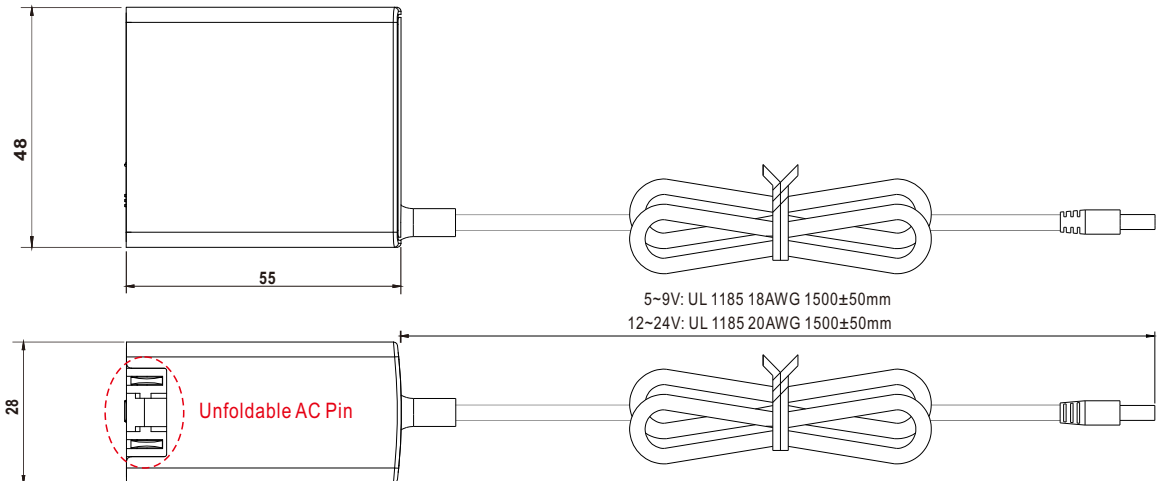


■ Mechanical Specification

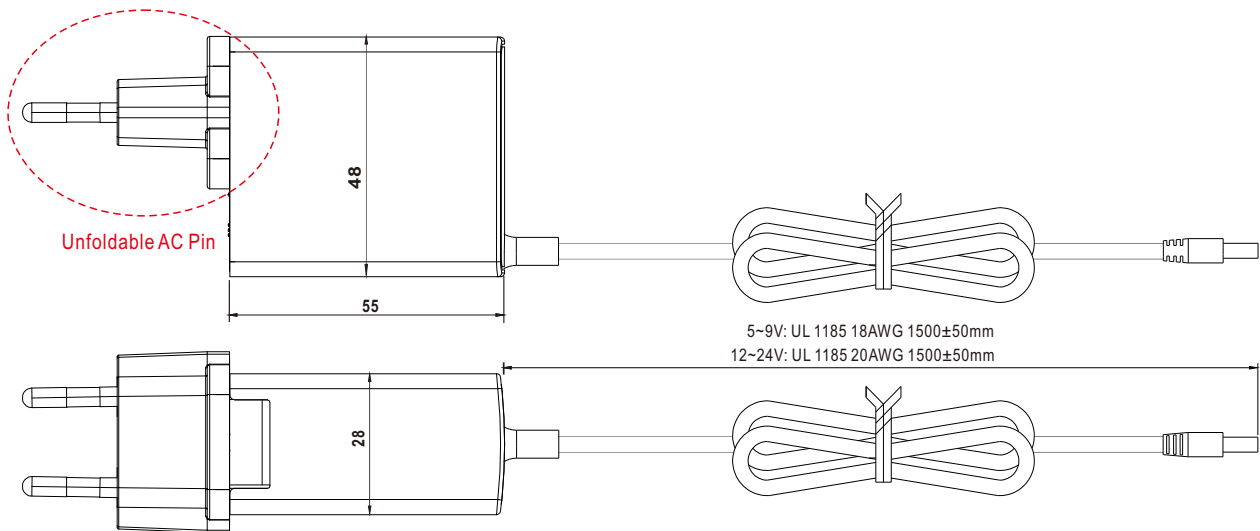
※ Cable connection

Unit:mm

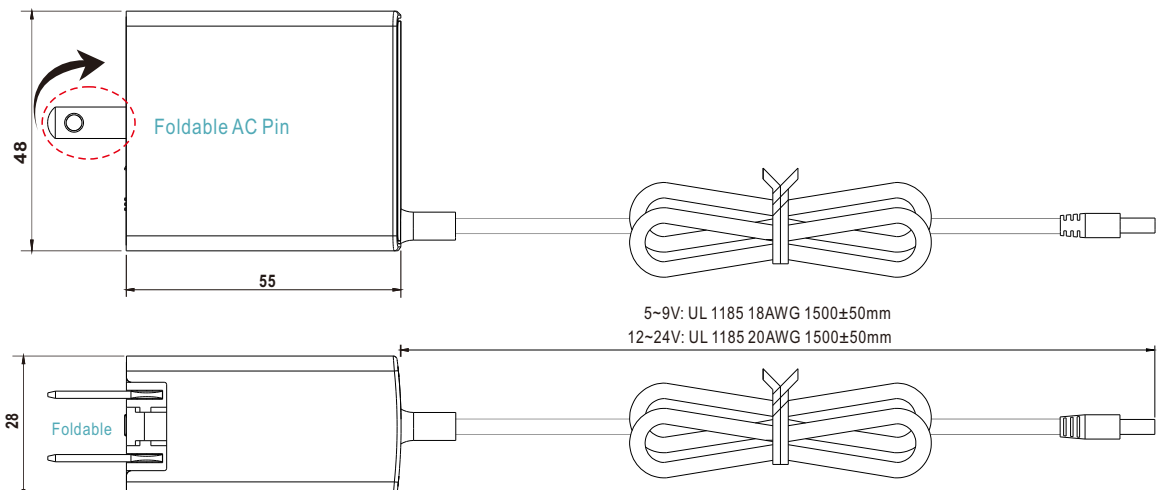
NGE18lxx-P1J (Universal Version - AC Pin fixed; With interchangeable plugs) :



NGE18Exx-P1J (EU Version - AC Pin fixed; With non-interchangeable plug) :



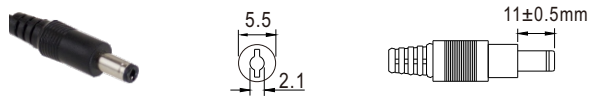
NGE18Uxx-P1J (US Version - Foldable AC Pin; With non-interchangeable plug) :



■ DC Output Plug

◎ Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	
	Outside  Inside

◎ DC plug changeable through:

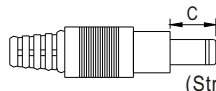
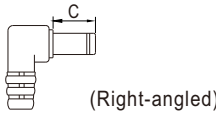
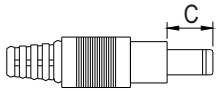
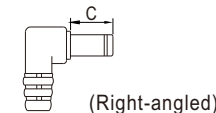
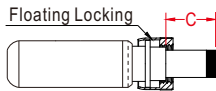
- (1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- (2) Quick adapter accessory (sold separately without MOQ)

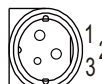
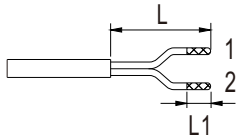
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

Example quick adapter accessory:



◎ Optional DC plug: (Available in customized cable or quick adapter)

Tuning Fork Style		Type No.	A	B	C	Quick Adapter Accessory
	 (Straight)	P1I	5.5	2.1	9.5	Available (Current rating: 7.5A max.)
		P1L	5.5	2.5	9.5	
		P1M	5.5	2.5	11.0	
	 (Right-angled)	P1IR	5.5	2.1	9.5	
		P1JR	5.5	2.1	11.0	
		P1LR	5.5	2.5	9.5	
		P1MR	5.5	2.5	11.0	
Barrel Style		Type No.	A	B	C	None
	 (Straight)	P2I	5.5	2.1	9.5	
		P2J	5.5	2.1	11.0	
		P2L	5.5	2.5	9.5	
	 (Right-angled)	P2M	5.5	2.5	11.0	
		P2IR	5.5	2.1	9.5	
		P2JR	5.5	2.1	11.0	
		P2LR	5.5	2.5	9.5	
		P2MR	5.5	2.5	11.0	
Lock Style		Type No.	A	B	C	None
		P2S(S761K)	5.53	2.03	12.06	
		P2K(761K)	5.53	2.54	12.06	
		P2C(S760K)	5.53	2.03	9.52	
		P2D(760K)	5.53	2.54	9.52	

Min. Pin Style	Type No.	A	B	C	Quick Adapter Accessory		
		OD	ID	L			
  EIAJ equivalent	P3A	2.35	0.7	11.0	Available (Current rating: 5A max.)		
	P3B	4.0	1.7	11.0			
	P3C	4.75	1.7	11.0			
Center Pin Style	Type No.	A	B	C	D	Available (Current rating: 7.5A max.)	
		OD	ID	L	Center Pin		
  EIAJ equivalent	P4A	5.5	3.4	11.0	1.0		
	P4B	6.5	4.4	11.0	1.4		
	P4C	7.4	5.1	11.0	0.6		
Min. DIN 3 Pin with Lock (male)	Type No.	Pin Assignment				Available (Current rating: 7.5A max.)	
		PIN No.	Output				
  KYCON KPPX-3P equivalent	R6B	1	+Vo				
		2	-Vo				
		3	+Vo				
Min. DIN 4 Pin with Lock (male)	Type No.	Pin Assignment				Available (Current rating: 7.5A max.)	
		PIN No.	Output				
  KYCON KPPX-4P equivalent	R7B	1	+Vo				
		2	-Vo				
		3	-Vo				
		4	+Vo				
Stripped and tinned leads	Type No.	Pin Assignment				None	
		PIN No.	Output				
  Length of Land L1 by request (MW's standard length, L: <u>25</u> mm, L1: <u>10</u> mm)	by customer	1 (Ribbed)	+Vo				
		2 (Letter)	-Vo				

■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>