# **GRID TIE INVERTERS**

## Perfect Blend of Safety and Efficiency

The NXi range from Luminous is available in single and three phase configurations. With best-in-class reliability and compliance to safety standards, the inverters are available in capacities from 3kW to 110 kW.



>99% Efficiency



8 Years Warranty



Remote Monitoring



## **MPPT**

#### **Maximum Power Point Tracking**

MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.



#### **Anti-Islanding Protection**

Disconnects the inverter from grid during power failure preventing any electrical shock to the linemen at work.



#### **IV Curve Scanning**

Allows IV curve scanning for each panel string & identify fault or abnormality (25kW & above models)



#### **String Level Monitoring**

Allows monitoring at each individual string level to ensure consistent output of system (25kW & above models)



#### **Night SVG Function**

Helps in providing sufficient reactive power required by grid & produces 60% of reactive power of its rated max output (50kW & above models)





#### **Solar Estimation Chart**

Solution		No. of MPPT	Panel Connection Combination per MPPT (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)	
GTI	PV Panel Watt				
NXI 3kW	550Wp x 8 No.s	1	8 (S)	480	
NXI 4kW	550Wp x 10 No.s	2	10 (S)	600	
NXI 5kW	550Wp x 12 No.s	2	12 (S)	720	
NXI 6kW	550Wp x 16 No.s	2	16 (S)	960	
NXI 8kW	550Wp x 20 No.s	2	20 (S)	1200	
NXI 10kW	550Wp x 26 No.s	2	26 (S)	1560	

# **Grid Tie System** LUMINOUS \*WiFi/GSM Dongle to be purchased separately (optional) A PV Panel Load Main Supply

## Single Phase

Model Name	Nxi 130	Nxi 140	Nxi 150			
Rated output power (kW)	3	4	5			
Input DC						
Max. DC Input Power (kW)	4.5	6.0	7.5			
Max. DC Input Voltage (V)	600	55	50			
Start-up Voltage [V]	90	100				
MPPT Voltage range (V)	80 - 500	90 - 550				
Max input current per MPPT (A)	14A	90 - 550 16A/16A				
Number of MPPT a	1	2				
Max Input Strings Number	1	2	2			
Output (AC)						
Rated output power (kW)	3	4	5			
Max. output power [kW]	3.3	4.4	5			
Max. output Current [A]	15.7	21	25			
Grid Frequency range (Hz)		50/60Hz				
Power Factor (at rated output power)	0.81 0.8					
Total harmonic distortion [THDi]	< 1.5%					
Feed-in phase/connection phase	Single Phase					
Efficiency						
Max. Efficiency	>97.2	>97	7.6			
MPPT Efficiency		>99.5				
Protection						
Inbuilt Protections	DC Reverse Polarity Protection, Short Circuit Protection, O/P Over Current Protection, O/P Over voltage protection, Insulation resistance monitoring, Residual current detection, surge protection slanding Protection, Temperature Protection					
Interface						
DC Connection		MC4 Connectors				
Display	LCD 2X 20 Z	LED + Blue	etooth App			
Datalogger & Communication		RS485/GSM/Wifi* (Optional)				
General Data						
Topology	Transformerless					
Consumption @ night		< 1 W				
Operating Temperature Range	-25°C to 60°C					
Cooling Method	Natural Convection					
Relative Humidity		0 - 100 %				
Max. Operational Altitude		4000m				
Noise [dBA]		<30dBA				
		> 20 years				
Designed Lifetime		<u> </u>				
Designed Lifetime Ingress Protection		IP66				
Designed Lifetime Ingress Protection Dimensions (W*H*D) (mm)	310W*373H*160D	<u> </u>	3H *160D			
Designed Lifetime Ingress Protection Dimensions (W*H*D) (mm) Net weight (Kg)	310W*373H*160D 7.7	IP66				
Designed Lifetime Ingress Protection Dimensions (W*H*D) (mm)	7.7	IP66 310W *54				

<sup>\*</sup> Check availablity of GSM or wifi dongle before ordering.

Technical specifications are subject to change without prior notice.





## Three Phase

MODEL	Nxi 305	Nxi 306	Nxi 308	Nxi 310	Nxi 312	Nxi 315	Nxi 320
Rated output power (kW)	5	6	8	10	12	15	20
Input DC					I		
Max. DC Input Power (kW)	7.5	9.0	12	15	18	22.5	30
Max. DC Input Voltage (V)				1100			
Start-up Voltage [V]				180			
MPPT Voltage range (V)				160 - 1000			
Max input current per MPPT (A)			16A/16A			32A/32A	
Number of MPPT				2			
Max Input Strings Number			2			4	
Output (AC)							
Rated output power (kW)	5	6	8	10	12	15	20
Max. output power [kW]	5.5	6.6	8.8	11	13.2	16.5	22
Max. output Current [A]	8.4	10	13.4	16.7	20.1	25.1	33.3
Grid Frequency range (Hz)				50/60 Hz			
Power Factor (at rated output power)				0.81 0.8			
Total harmonic distortion [THDi]				<2%			
Feed-in phase/connection phase	Three Phase						
Efficiency							
Max. Efficiency			98.30%			98.60%	
MPPT Efficiency				99.5%			
Protection							
Inbuilt Protections	O/P 0	Over voltage protection	arity Protection, Sho on, Insulation resista otection, Temperatu	nce monitoring, Re	esidual current dete	ection, surge prote	ction,
Interface							
DC Connection				MC4 Connector	rs		
Display				LCD 2X 20Z			
Datalogger & Communication			RS48	5/GSM/Wifi* (Op	tional)		
General Data							
Topology				Transformerles	s		
Consumption @ night	<1W						
Operating Temperature Range				-25°C to 60°C	:		
Cooling Method			Natural Convection		Intelligen	t Redundant Fan C	olling
Relative Humidity	0 to 100%						
Max. Operational Altitude	4000m						
Noise [dBA]	<30 dBA						
Designed Lifetime				> 20 years			
Ingress Protection			7 - 1 - 1	IP66			
Dimensions (W*H*D) (mm)		310W*563H*129D 310W*608H*219D					100
, , ,							1/0
			17.8		18	3.8	20
Net weight (Kg) Standards			17.8		18	3.8	i

<sup>\*</sup> Check availablity of GSM or wifi dongle before ordering.

Technical specifications are subject to change without prior notice.

# Three Phase

MODEL	Nxi 325	Nxi 330	Nxi 350	Nxi 3600	Nxi 380	Nxi 3100	Nxi 3110	
Rated output power (kW)	25	30	50	60	80	100	110	
Input DC			'					
Max. DC Input Power (kW)	37.5	45	75	90	120	150	165	
Max. DC Input Voltage (V)			11	.00				
Start-up Voltage [V]	180			95		180		
MPPT Voltage range (V)		200-1000		180 - 1000		160 - 1000		
Max input current per MPPT (A)	32A/32A	A/32A	5*32A	6*32A	3*40A+3*32A	4*40A+4*32A		
Number of MPPT	3		5		6	5 8		
Max Input Strings Number	6		10	12		16		
Output (AC)								
Rated output power (kW)	25	30	50	60	80	100	110	
Max. output power [kW]	27.5	33	55	66	88	110	121	
Max. output Current [A]	27.5	33	83.3	100	133.7	167.1	183.8	
Grid Frequency range (Hz)	50/60	) Hz	47-52	or 57-62		50/60 Hz		
Power Factor (at rated output power)				0.8	1 0.8			
Total harmonic distortion [THDi]		<3%		<2%		<3%		
Feed-in phase/connection phase				Three Phase				
Efficiency								
Max. Efficiency	98.	5%	98	.7%		98.5%		
MPPT Efficiency			>99.5%	99.5%				
Protection								
Inbuilt Protections	DC Reverse Polarity Protection, Short Circuit Protection, O/P Over Current Protection, O/P Over voltage protection, Insulation resistance monitoring, Residual current detection, surge protection, Islanding Protection, Temperature Protection, Integrated DC Switch (optional)							
Interface								
DC Connection				MC4 Connectors	5			
Display				LCD, 2x20 Z				
Datalogger & Communication	RS485/GSM/Wiff* (Optional)							
General Data								
Topology				Transformerless				
Consumption @ night		<	1 W		7	< 2 W		
Operating Temperature Range				-25°C to 60°C				
Cooling Method	Intelligent redundant fan cooling							
Relative Humidity	0 to 100%							
Max. Operational Altitude				4000m				
Noise [dBA]	<3	0 dBA	<60	O dBA		<65 dBA		
Designed Lifetime				> 20 years				
Ingress Protection				IP66				
Dimensions (W*H*D) (mm)	647W*62	9H*252D	630W*7	00H*357D	1065W*587H*363D	1183W*58	5H*363D	
Net weight (Kg)	3	7	5	4.5	79.5	9	93	
Standards								
Safety/EMC			DIC C	ertified as per IS/II	CC share dayed:			





#### For more information



# youtube/user/myluminousindia





Subscribe to our Channel

Follow our Social Media Channels & Visit our Website for Blogs, Videos & more product information.