

1 Inverter Specification

Model Description

Model numbers on name plate consist of numbers, symbols, and letters, to express its respective series, suitable power type, power level and other information.



LAR100 - 4 T - 4.0G

①: serie name	
LAR	Larens series inverter
100	Asynchronous motor driver
200	PMSM driver
②: Voltage degree	
2	220Vac
4	380Vac
6	660Vac
③: Voltage type	
S	Single phase AC input
T	Three phase AC input
④: Rate power	
G	Constant torque load
P	Variable torque load
...	.....
4.0	4.0KW
5.5	5.5KW
...	.....

2 Inverter Features

Apply to all kinds of single phase or 3 phase AC induction motor .  
 With Infineon IGBT .Maximum power point tracking (MPPT) algorithm for dynamic VI, fast response speed, Good stability, the efficiency of MPPT 99.99%;  
 Both AC and DC input, but can not use DC and AC at the same time.  
 For single phase inverter , MPPT working voltage is 180V~450V ; for three phase inverter , MPPT working voltage is 250V~800V .  
 Remote control , support RS323/RS485 protocol.  
 Outdoor working environment temperature: -10~+40  
 Start in the morning and stop in the late afternoon full automatically.  
 Full protections : overload , over current, over voltage , under voltage ,short circuit , dry pumping etc,  
 PV reversed connection protection.

3 Parameters :

Solar Pump Inverter

Model	Rated Power		DC Input VOC Voltage(V)	Recommend VOC Voltage(V)	Recommend MPPT Voltage(V)	Max. DC Input Current (A)	Rated Output Current(A)	Rated Output Voltage(V)	Output Frequency(Hz)
	KW	HP							
LAR100-2S-0.7G	0.75	1	300~450	388~450	320~370	8.5	7	Single Phrase 220	0-50/60
LAR100-2S-1.5G	1.5	2	300~450	388~450	320~370	14	9.6	Single Phrase 220	0-50/60
LAR100-2S-2.2G	2.2	3	300~450	388~450	320~370	23	17	Single Phrase 220	0-50/60
LAR100-2S-4.0G	4	5	300~450	388~450	320~370	35	25	Single Phrase 220	0-50/60
LAR100-2T-0.7G	0.75	1	200~450	388~450	320~370	8.5	4	Three Phrase 220	0-50/60
LAR100-2T-1.5G	1.5	2	200~450	388~450	320~370	14	7	Three Phrase 220	0-50/60
LAR100-2T-2.2G	2.2	3	200~450	388~450	320~370	23	9.6	Three Phrase 220	0-50/60
LAR100-2T-4.0G	4	5	200~450	388~450	320~370	35	17	Three Phrase 220	0-50/60
LAR100-2T-5.5G	5.5	7.5	200~450	388~450	320~370	50	25	Three Phrase 220	0-50/60
LAR100-4T-0.7G	0.75	1	300~780	670~780	540~630	8.5	2.5	Three Phrase 380	0-50/60
LAR100-4T-1.5G	1.5	2	300~780	670~780	540~630	8.5	3.8	Three Phrase 380	0-50/60
LAR100-4T-2.2G	2.2	3	300~780	670~780	540~630	14	5.1	Three Phrase 380	0-50/60
LAR100-4T-4.0G	4	5	300~780	670~780	540~630	23	9	Three Phrase 380	0-50/60
LAR100-4T-5.5G	5.5	7.5	300~780	670~780	540~630	23	13	Three Phrase 380	0-50/60
LAR100-4T-7.5G	7.5	10	300~780	670~780	540~630	35	17	Three Phrase 380	0-50/60
LAR100-4T-11G	11	15	300~780	670~780	540~630	35	25	Three Phrase 380	0-50/60
LAR100-4T-15G	15	20	300~780	670~780	540~630	50	32	Three Phrase 380	0-50/60
LAR100-4T-18.5G	18.5	25	300~780	670~780	540~630	50	37	Three Phrase 380	0-50/60
LAR100-4T-22G	22	30	300~780	670~780	540~630	75	45	Three Phrase 380	0-50/60
LAR100-4T-30G	30	40	300~780	670~780	540~630	75	60	Three Phrase 380	0-50/60
LAR100-4T-37G	37	50	300~780	670~780	540~630	100	75	Three Phrase 380	0-50/60
LAR100-4T-45G	45	6	300~780	670~780	540~630	100	91	Three Phrase 380	0-50/60
LAR100-4T-55G	55	75	300~780	670~780	540~630	150	112	Three Phrase 380	0-50/60
LAR100-4T-75G	75	100	300~780	670~780	540~630	225	150	Three Phrase 380	0-50/60
LAR100-4T-90G	90	120	300~780	670~780	540~630	300	176	Three Phrase 380	0-50/60
LAR100-4T-110G	110	150	300~780	670~780	540~630	375	210	Three Phrase 380	0-50/60
LAR100-4T-132G	132	175	300~780	670~780	540~630	450	253	Three Phrase 380	0-50/60

4 Technical Parameter Table  
4.1 Single phase inverter 220V(LAR100-2S-0.4G~4.0G)

Input specification	
<b>PV Input</b>	
Maximum Input PV Voltage (PV Open-circuit Voltage)	800VDC
Recommended MPPT Voltage Range	400-720VDC
Recommended Input Operation Voltage	550VDC (Vmpp)
<b>Grid or backup generator input</b>	
Input voltage	1PH 220V(-15%~30%)
<b>Output specification</b>	
Rated output voltage	1PH 220V
Output frequency	0 ~ 600.00Hz (default: 0 ~ 60.00Hz)
<b>Protection</b>	
Built-in Protection	Lighting Protection, over-current, overvoltage, output phase-lose, under-load, under-voltage, short circuit, overheating, water pump run dry etc.

4.2 Three Phase inverter 220V (LAR100-2T-0.7G~5.5G)

Input specification	
<b>PV Input</b>	
Maximum Input PV Voltage (PV Open-circuit Voltage)	450VDC
Recommended MPPT Voltage Range	150-400VDC
Recommended Input Operation Voltage	330VDC (Vmpp)
<b>Grid or backup generator input</b>	
Input voltage	3PH 220V(-15%~30%)
<b>Output specification</b>	
Rated output voltage	3PH 220V
Output frequency	0 ~ 600.00Hz (default: 0 ~ 60.00Hz)
<b>Protection</b>	
Built-in Protection	Lighting Protection, over-current, overvoltage, output phase-lose, under-load, under-voltage, short circuit, overheating, water pump run dry etc.

4.3 Three Phase inverter 380V (LAR100-4T-0.7G~132G)

Input specification	
<b>PV Input</b>	
Maximum Input PV Voltage (PV Open-circuit Voltage)	800VDC
Recommended MPPT Voltage Range	400~720VDC
Recommended Input Operation Voltage	550VDC (Vmpp)
<b>Grid or backup generator input</b>	
Input voltage	Three phase 380V(-15%~30%)
<b>Output specification</b>	
Rated output voltage	3PH 380V
Output frequency	0~600.00Hz (Default 0~60.00Hz)
<b>Protection</b>	
Built-in Protection	Lighting Protection, over-current, overvoltage, output phase-lose, under-load, under-voltage, short circuit, overheating, water pump run dry etc.

Application Site	No direct sunshine, no dust, corrosive gas, combustible gas, oil mist, steam, dripping or salinity etc.
Altitude	0~2000 m Derated use above 1000m,per 100m, the rated output current decrease 1%.
Environment Temperature	-10°C~40°C (Environment Temperature be 40°C~50°C, please keep derated use.)
Humidity	5~95%,non-condensation
Vibration	less than 5.9 m/s <sup>2</sup> (0.6g)
Storage Temperature	-20°C~+70°C
Efficiency	Rated Power Run≥93%
Installation	Wall or rail mounting
Cooling	Forced Air Cooling