Lauritz Knudsen
Electrical & Automation

IZ5 Series
Solar On-grid Inverter

Powered by 40 GW of Electrication Experience
Engineered for every Rooftop application



Certifications

BIS | BEE | IEC



ABOUT US

Lauritz Knudsen Electrical & Automation is a leading player in the Indian Electrical industry, drawing strength from over 70 years of rich heritage and a steadfast dedication to contributing towards the growth of India. The brand currently exports to 30 + countries and is dedicated to providing a wide range of electrical and automation solutions to vital sectors of the economy, including industries, utilities, infrastructure, buildings, and agriculture. Our extensive portfolio includes low-voltage and medium-voltage switchgear, automation solutions, tailored software, and services.

With multiple manufacturing facilities in India, we adhere to global standards of excellence. Our operations are supported by well-equipped, in-house design and development centers, as well as tooling facilities, ensuring precision in manufacturing.

With a strong global footprint, supported by an expansive electrical distribution network in India and worldwide, our ambition is to foster excellence and provide top-tier products and solutions that drive the progress of nations globally.

Solar On-Grid Inverter IZ5

With 40 GW of solar electrification experience, Lauritz Knudsen brings a legacy of engineering excellence directly to your doorstep. We've distilled decades of expertise into high-efficiency inverters specifically engineered to master the unique demands of rooftop applications. From dawn till dusk, our 99%+ MPPT accuracy makes provision that no ray of sunlight is wasted-converting every photon of Potential into 5.5 kW of relentless, dependable power.

Key Features

- Max efficiency up to 96.95%
- Single & Dual MPPT options
- IP65 protection
- Natural convection cooling
- Remote monitoring: RS485 / Wi-Fi / GSM
- Advanced protections including AFCI (optional)
- Integrated DC Switch - Optional

Technical Highlights

- PV Voltage Range: 45–1100 V (model dependent)
- Grid: Single-phase & Three-phase options
- MPPT Efficiency: >99%
- AC Output Range: 1kW–10kW
- Operating Temp: -25°C to +60°C
- Warranty: 7 years (+3 years with registration)

Why Choose Larutiz Knusen

› Proven Scale: Over 40,000 MW (40 GW) of solar power managed by our technology.

› India-Ready: Designed to handle the voltage fluctuations and thermal conditions of the Indian grid.

› Maximum Yield: 99%+ MPPT accuracy for peak performance in all light levels.

› Silent Power: Advanced cooling allows for high-output performance without the noise.

› Total Protection: IP65 waterproofing and a comprehensive 10-year warranty.

› Made in India.

Single Phase Solar On-Grid Inverter

SYSTEM	SINGLE PHASE							
RATINGS	1kW	1.5kW	2kW	2.5kW	3kW	3.3kW	3.4kW	3.6kW
MODEL	IZONS0010N05	IZONS0015N05	IZONS0020N05	IZONS0025N05	IZONS0030N05	IZONS0033N05	IZONS0034N05	IZONS0036N05
INPUT SPECIFICATIONS (DC)								
MAX. ALLOWABLE PV POWER (kW)	1.5	2.25	3	3.75	4.5	4.95	5.1	5.4
NOMINAL PV VOLTAGE (V)	360							
MAX. DC INPUT VOLTAGE (V)	550							
START-UP VOLTAGE (V)	45							
OPERATING RANGE (V)	45-550							
MPPT VOLTAGE RANGE (V)	45-550							
MAX INPUT CURRENT PER MPPT (A)	17							
NUMBER OF MPPT	1							
STRING PER MPPT TRACKER	1							
MAXIMUM PV SHORT CIRCUIT CURRENT PER MPPT (ISC)	20							
OUTPUT SPECIFICATIONS (AC)								
RATED OUTPUT POWER (kW)	1.1	1.5	2	2.5	3	3.3	3.4	3.6
MAX. AC POWER (kVA)	1.1	1.5	2	2.5	3	3.3	3.4	3.6
NOMINAL AC CURRENT, RMS (A)	4.16	6.25	8.33	10.41	12.50	13.75	14.16	15
MAX. OUTPUT CURRENT (A)	4.76	7.14	9.52	11.90	14.28	15.71	15.71	15.71
GRID VOLTAGE RANGE (V)	216-264							
GRID FREQUENCY RANGE (HZ)	50							
POWER FACTOR (AT RATED OUTPUT POWER)	>0.99 (Adjustable from 0.8 leading to 0.8 lagging)							
TOTAL HARMONIC DISTORTION (THDI)	<3% at rated load							
FEED-IN PHASE/ CONNECTION PHASE	Single phase							
EFFICIENCY								
MAX. EFFICIENCY (%)	96.44							
MPPT EFFICIENCY (%)	>99.9							
EURO EFFICIENCY (%)	96							
PROTECTIONS								
SURGE PROTECTION	Type II SPD on AC and DC side							
OTHER PROTECTION	DC reverse polarity protection, Short circuit protection, Over current protection, Over voltage / Under voltage protection, Over frequency / Under frequency, Insulation resistance monitoring, Residual current detection, Surge protection, Anti-Islanding protection, Temperature protection							
INTEGRATED DC SWITCH	Optional							
INTEGRATED AFCI (DC ARC-FAULT CIRCUIT PROTECTION)	Optional							
INTERFACE								
DC CONNECTION	MC4 connectors							
DISPLAY	LCD with LED indication							
DATALOGGER & COMMUNICATION	Transformerless							
TOPOLOGY	RS485 (default) / Wi-Fi / GSM (To be ordered along with inverter separately)							
CONSUMPTION @NIGHT (W)	<0.5							
OPERATING TEMPERATURE RANGE	-25 °C to +60 °C							
COOLING METHOD	Natural convection							
RELATIVE HUMIDITY	0 to 100% non-condensing							
MAX. OPERATIONAL ALTITUDE	4000m							
NOISE (dBA)	<30							
DESIGN LIFETIME	>20 years							
WARRANTY	7 Years + 3 Years additional if product is registered on app within 15 days of commissioning							
INGRESS PROTECTION	IP65							
DIMENSIONS IN MM (W*H*D)	256*302*142							
NET WEIGHT (KG)	4.4							
MECHANICAL INTEGRATION	Wall mountable							
CERTIFICATIONS (BIS)	IS 16221-1/2, IS 16169							
PROTECTION	IS 16169 : 2019 / IEC 62116 : 2014, IS 16221 (part 2) : 2015 / IEC 62109-2 : 2011							
ENVIRONMENTAL	IEC 60529							
ELECTRICAL	IS 17980 : 2022 / IEC 62891 : 2020, IEC 61000							

SYSTEM	SINGLE PHASE			
RATINGS	4kW	4.4kW	5kW	5.4kW
MODEL	IZONS0040N05	IZONS0044N05	IZONS0050N05	IZONS0054N05
INPUT SPECIFICATIONS (DC)				
MAX. ALLOWABLE PV POWER (kW)	6	6.6	7.5	8.1
NOMINAL PV VOLTAGE (V)	360			
MAX. DC INPUT VOLTAGE (V)	550			
START-UP VOLTAGE (V)	50			
OPERATING RANGE (V)	50-550			
MPPT VOLTAGE RANGE (V)	50-550			
MAX INPUT CURRENT PER MPPT (A)	20			
NUMBER OF MPPT	1			
STRING PER MPPT TRACKER	1			
MAXIMUM PV SHORT CIRCUIT CURRENT PER MPPT (ISC)	30			
OUTPUT SPECIFICATIONS (AC)				
RATED OUTPUT POWER (kW)	4	4.4	5	5.4
MAX. AC POWER (kVA)	4	4.4	5	5.4
NOMINAL AC CURRENT, RMS (A)	16.66	18.4	20.8	22.5
MAX. OUTPUT CURRENT (A)	19.04	20	23.8	24.76
GRID VOLTAGE RANGE (V)	216-264			
GRID FREQUENCY RANGE (HZ)	50			
POWER FACTOR (AT RATED OUTPUT POWER)	>0.99 (Adjustable from 0.8 leading to 0.8 lagging)			
TOTAL HARMONIC DISTORTION (THDI)	<3% at rated load			
FEED-IN PHASE/ CONNECTION PHASE	Single phase			
EFFICIENCY				
MAX. EFFICIENCY (%)	96.95			
MPPT EFFICIENCY (%)	>99			
EURO EFFICIENCY (%)	96			
PROTECTIONS				
SURGE PROTECTION	Type II SPD on AC and DC side			
OTHER PROTECTION	DC reverse polarity protection, Short circuit protection, Over current protection, Over voltage / Under voltage protection, Over frequency / Under frequency, Insulation resistance monitoring, Residual current detection, Surge protection, Anti-Islanding protection, Temperature protection			
INTEGRATED DC SWITCH	Optional			
INTEGRATED AFCI (DC ARC-FAULT CIRCUIT PROTECTION)	Optional			
INTERFACE				
DC CONNECTION	MC4 connectors			
DISPLAY	LCD with LED indication			
DATALOGGER & COMMUNICATION	RS485 (default) / Wi-Fi / GSM (To be ordered along with inverter separately)			
TOPOLOGY	Transformerless			
CONSUMPTION @NIGHT (W)	<1			
OPERATING TEMPERATURE RANGE	-25 °C to +60 °C			
COOLING METHOD	Natural convection			
RELATIVE HUMIDITY	0 to 100% non-condensing			
MAX. OPERATIONAL ALTITUDE	4000m			
NOISE (dBA)	<30			
DESIGNED LIFETIME	<20 years			
WARRANTY	7 Years + 3 Years additional if product is registered on app within 15 days of commissioning			
INGRESS PROTECTION	IP65			
DIMENSIONS IN MM (W*H*D)	290*354*153			
NET WEIGHT (KG)	7.65			
MECHANICAL INTEGRATION	Wall mountable			
CERTIFICATIONS (BIS)	IS 16221-1/2, IS 16169			
PROTECTION	IS 16169 : 2019 / IEC 62116 : 2014, IS 16221 (part 2) : 2015 / IEC 62109-2 : 2011			
ENVIRONMENTAL	IEC 60529			
ELECTRICAL	IS 17980 : 2022 / IEC 62891 : 2020, IEC 61000			

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Product improvement is a continuous process. For the latest information and special application, please contact any of our offices listed here. Product photographs shown for representative purpose only.

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