

IZ5 Series Solar On-grid Inverter

Powered by 50 GW of “Electrification” 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 committed 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, Industrial drives and 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 50 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 relentless, dependable power.

Key Features



Max efficiency up to 96.95%



Natural convection cooling



Single & Dual MPPT options



Remote monitoring: RS485/Wi-Fi/GSM



IP65 protection



Advanced protections including AFCI (optional)



Integrated DC Switch - Optional

Technical Highlights



PV Voltage Range: 45-1100 V
(model dependent)



AC Output Range: 2 kW to 10 kW



Grid: Single-phase &
Three-phase options



Operating Temp: -25°C to +60°C



MPPT Efficiency: >99%



Warranty: Upto 10 years

Why Choose Larutiz Knusen

- › Proven Scale: Over 50,000 MW (50 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	2 kW	3 kW	3.6 kW
MODEL	IZONS0020N05	IZONS0030N05	IZONS0036N05
INPUT SPECIFICATIONS (DC)			
MAX. ALLOWABLE PV POWER (kW)	3	4.5	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)	45-500		
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)	2	3	3.6
MAX. AC POWER (kVA)	2	3	3.6
NOMINAL AC CURRENT, RMS (A)	8.33	12.50	15
MAX. OUTPUT CURRENT (A)	9.52	14.28	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	RS485 (default)/Wi-Fi/GSM (To be ordered along with inverter separately)		
TOPOLOGY	Transformerless		
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	4000 m		
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		
SAFETY	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	4 kW	5 kW	5.4 kW
MODEL	IZONS0040N05	IZONS0050N05	IZONS0054N05
INPUT SPECIFICATIONS (DC)			
MAX. ALLOWABLE PV POWER (kW)	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)	50-500		
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	5	5.4
MAX. AC POWER (kVA)	4	5	5.4
NOMINAL AC CURRENT, RMS (A)	16.66	20.8	22.5
MAX. OUTPUT CURRENT (A)	19.04	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	4000 m		
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		
SAFETY	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	6 kW
MODEL	IZONS0060N05
INPUT SPECIFICATIONS (DC)	
MAX. ALLOWABLE PV POWER (kW)	9
NOMINAL PV VOLTAGE (V)	360
MAX. DC INPUT VOLTAGE (V)	600
START-UP VOLTAGE (V)	50
OPERATING RANGE (V)	50-600
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)	6
MAX. AC POWER (kVA)	6
NOMINAL AC CURRENT, RMS (A)	25
MAX. OUTPUT CURRENT (A)	28.57
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	4000 m
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*425*155
NET WEIGHT (KG)	7.8
MECHANICAL INTEGRATION	Wall mountable
CERTIFICATIONS (BIS)	IS 16221-1/2, IS 16169
SAFETY	IS 16169 : 2014/IEC 62116, IS 16221 (PART 2) : 2015/IEC 62109-2 : 2011
ENVIRONMENTAL	IEC 60529
ELECTRICAL	IS 17980 : 2022/IEC 62891 : 2020, IEC 61000

Three Phase Solar On Grid Inverter

SYSTEM	THREE PHASE		
RATINGS	5 kW	8 kW	10 kW
MODEL	IZONT0050Y05	IZONT0080Y05	IZONT0100Y05
INPUT SPECIFICATIONS (DC)			
MAX. ALLOWABLE PV POWER (kW)	7.5	12	15
NOMINAL PV VOLTAGE (V)	600		
MAX. DC INPUT VOLTAGE (V)	1100		
START-UP VOLTAGE (V)	140		
OPERATING RANGE (V)	120-1000		
MPPT VOLTAGE RANGE (V)	120-1000		
MAX INPUT CURRENT PER MPPT (A)	22+22		
NUMBER OF MPPT	2		
STRING PER MPPT TRACKER	1		
MAXIMUM PV SHORT CIRCUIT CURRENT PER MPPT (ISC)	30+30		
OUTPUT SPECIFICATIONS (AC)			
RATED OUTPUT POWER (kW)	5	8	10
MAX. AC POWER (kVA)	5.5	8.8	11
NOMINAL AC CURRENT, RMS (A)	6.94	11.11	13.88
MAX. OUTPUT CURRENT (A)	8	12.88	16
GRID VOLTAGE RANGE (V)	216-264/374-457		
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	3 phase, N, PE		
EFFICIENCY			
MAX. EFFICIENCY (%)	98		
MPPT EFFICIENCY (%)	>99		
EURO EFFICIENCY (%)	97.5		
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	Yes		
INTEGRATED AFCI (DC ARC-FAULT CIRCUIT PROTECTION)	Optional		
INTERFACE			
DC CONNECTION	MC4 connectors		
DISPLAY	LCD with LED indications		
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	4000 m		
NOISE (dBA)	<30		
DESIGN LIFETIME	>20 years		
WARRANTY	7 years		
INGRESS PROTECTION	IP65		
DIMENSIONS IN MM (W*H*D)	285*502*178		
NET WEIGHT (KG)	11		
MECHANICAL INTEGRATION	Wall mountable		
SAFETY	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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