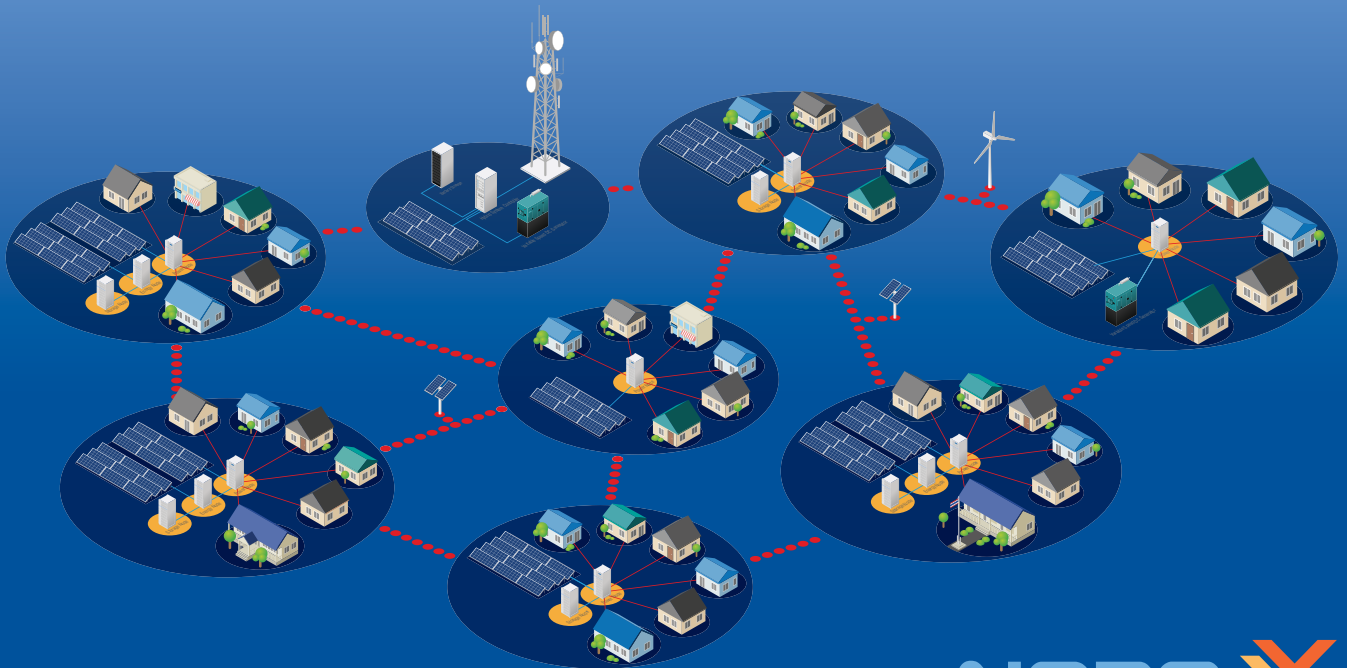


Decentralized Microgrid with Energy Trading Platform for Remote Village

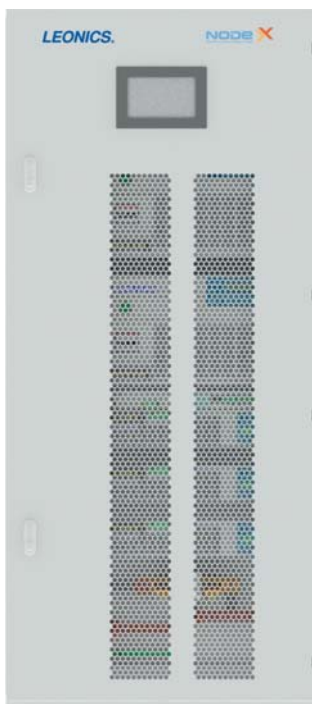
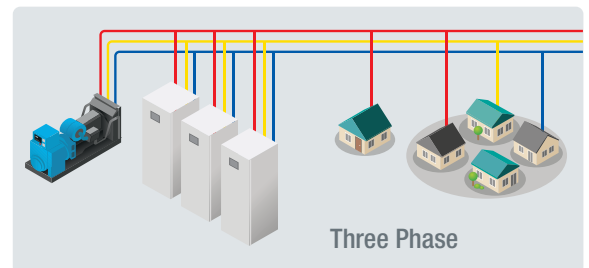


Node X
Network of Decentralized Energy

NODEX technology can reduce OPEX and CAPEX of rural electrification

NODEX allows the network of decentralized microgrid grow dynamically with **FLEXIBLE** and **SCALABLE** system power.

NODEX also can **EXPAND** subscribers and improve power distribution reliability with connecting **REDUNDANCY** decentralized microgrids together.



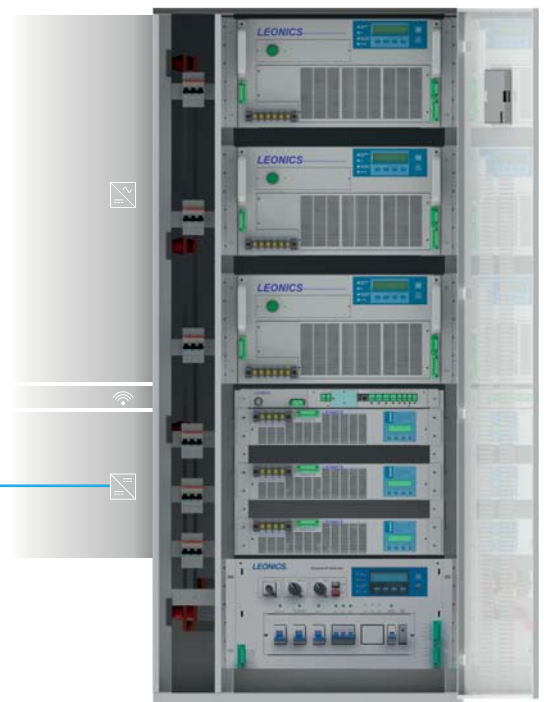
Power Node

- Bidirectional Inverters
- Solar Charge Controllers
- Advanced AC Node Hub (option)
- Touch screen display (option)

Power Node

- PNx-151800/s
- PNx-181800/s

x = sa (Sealed lead acid battery)
= a (Lead acid battery)
= i (Lithium-ion or LFP battery)



SPECIFICATIONS			PNx-151800/s	PNx-181800/s
BIDIRECTIONAL INVERTER 	AC Output	Rated power	15 kVA / 15 kW	18 kVA / 18 kW
		Maximum power at 25°C for 1 hour	16.2 kVA / 16.2 kW	19.2 kVA / 19.2 kW
		Voltage	380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N)	
		Voltage regulation	± 1% (steady load), < 7% at 100% step load within 0.1 sec.	
		Phase	Three phase	
		Frequency	50 / 60 Hz ± 0.1% (auto sensing)	
		Wave form	Pure sine wave	
		Total harmonic distortion (THDv)	Total < 3%	
		Maximum AC current	22.7 A / phase	27.3 A / phase
		Inverter peak efficiency	> 96.5%	
SYSTEM CONTROLLER 	System Control Unit (SCU)	Wifi (standard), LAN (optional)	Monitor and control system, send and receive system data, local monitoring or remote monitoring	
		Touch screen display	Optional	
	PV Input	Total PV power	19.8 kWp	
		Number of solar charge controller	3 modules	
		Number of PV input per module	1 x terminal block	
		PV power per module	6.6 kWp	
		PV current per module	100 A	
		MPPT tracking voltage (Vmp)	85 - 126 Vdc	
		Max. open circuit voltage (Voc)	< 150 Vdc	
		Charger peak efficiency	> 98%	
	DC Output	Nominal battery voltage	48 Vdc	
		Maximum charging current	360 A	
		Battery type	Sealed lead acid / Lead acid / Lithium-Ion (LFP)	
	ADVANCED AC NODE HUB (OPTIONAL)	Maximum generator power	45 kVA (ANH3a-204520)	
		Utility grid	20 kVA (ANH3a-202020)	
	ENERGY STORAGE SYSTEM (ESS)		External battery	
ENVIRONMENT		Temperature	0 - 45°C	
		Relative humidity	0 - 95 % (Non - condensing)	
		Pollution degree classification	III	
		Maximum operating altitude	2,000 m / 6,560 feet (without derating)	
DESIGN REGULATION	Standard		IEC 61683, IEC 62109-1, IEC 62109-2	
	Ingress protection		IP30	
	Protective class		I	
	Overvoltage category		II (input and output) (in accordance with IEC 62109-1)	
DIMENSION	W x H x D		76 x 200 x 82.5 cm (42U)	
WEIGHT	Approximate in kg		343.5 kg	346.5 kg

Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.
The "x" in the model name represent the battery type in the system. "sa" for Sealed Lead Acid, "a" for Lead Acid, and "i" for Lithium-ion (LFP) battery.

Authorized Distributor

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■ www.leonics.com ■

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