

NX-TRIX50 



NEXUS SERIES

3-in-1 Charger

- DC-DC Charger , MPPT Solar Charger, AC-DC Charger
- Suitable for 12V / 24V Battery Systems
- 50A Total Output Current
- 7 x Charging Modes
- Bluetooth & Mobile App for real time monitoring
- Supports Modbus & CANBus (RV-C) Communication

MODEL		NX-TRIX50	
PV INPUT			
Max. Input Voltage		9~32V	
MPPT Voltage Range		15 ~ 50VDC	
Max. Input Current		50A	
Rated Charging Current	12V House battery	50A	
	24V House battery	25A	
Max. Input Power	12V House battery	700W	
	24V House battery		
AC INPUT (GRID)			
AC Input Voltage		90~265VAC	
AC Input Voltage Frequency Range		45~65Hz	
AC Rated Charging Current	12V House battery	50A	
	24V House battery	25A	
STARTER BATTERY / ALTERNATOR			
Battery Type		Lead-Acid	
System Voltage		12/24V(automatic recognition)	
Alternator voltage range	Conventional Alternator	13.2~16VDC/26.4~32VDC	
	Standard Alternator	12~16VDC/24~32VDC	
	User-defined	11~14VDC adjustable(24V Generator system*2)	
Rated Alternator Charging Current		House Battery 12V 50A House Battery 24V 25A	
Max. Alternator Input Current		65A	
Alternator Charging Mode		Buck, Boost	
HOUSE BATTERY			
Battery Type		Lead-Acid / Li-ion / User-defined	
System Voltage		12/24V(automatic recognition)	
Battery Voltage Range		9~32VDC	
EFFICIENCY			
MPPT Tracking Efficiency		>99%	
Max. Charging Conversion Efficiency		96%	
GENERAL			
Dimensions		W260 X H210 X D90 mm	
Weight		4.5kg	
Ingress Protection		electronic component: IP43 wiring terminal: IP22	
Altitude		≤3000m	
Operating temperature		-35~65 °C	
Communication		TTL/RS485/Bluetooth/CAN	
PROTECTION			

MODE 1 

MODE 2 

MODE 3 

MODE 4 

MODE 5 

MODE 6 

MODE 7 

Safety & Compliance

- Designed and tested to comply with AS/NZS electrical and safety standards.
- Installation must be performed by a qualified technician.
- Failure to follow installation requirements voids warranty and releases Arizon from liability.



Arizon Off Grid – NEXUS – TriX50 3-in-1 Charging Unit

Thermal Management & Installation Requirements

The TriX50 is a high-performance charging system delivering up to 50A Output. It generates significant heat under load. Improper mounting or insufficient ventilation can lead to thermal shutdown, reduced performance, or fire hazards.

Mounting Orientation

- MUST be mounted vertically with fins facing upward.
- Do not mount horizontally or upside-down.
- Incorrect orientation will impair airflow and may cause overheating.

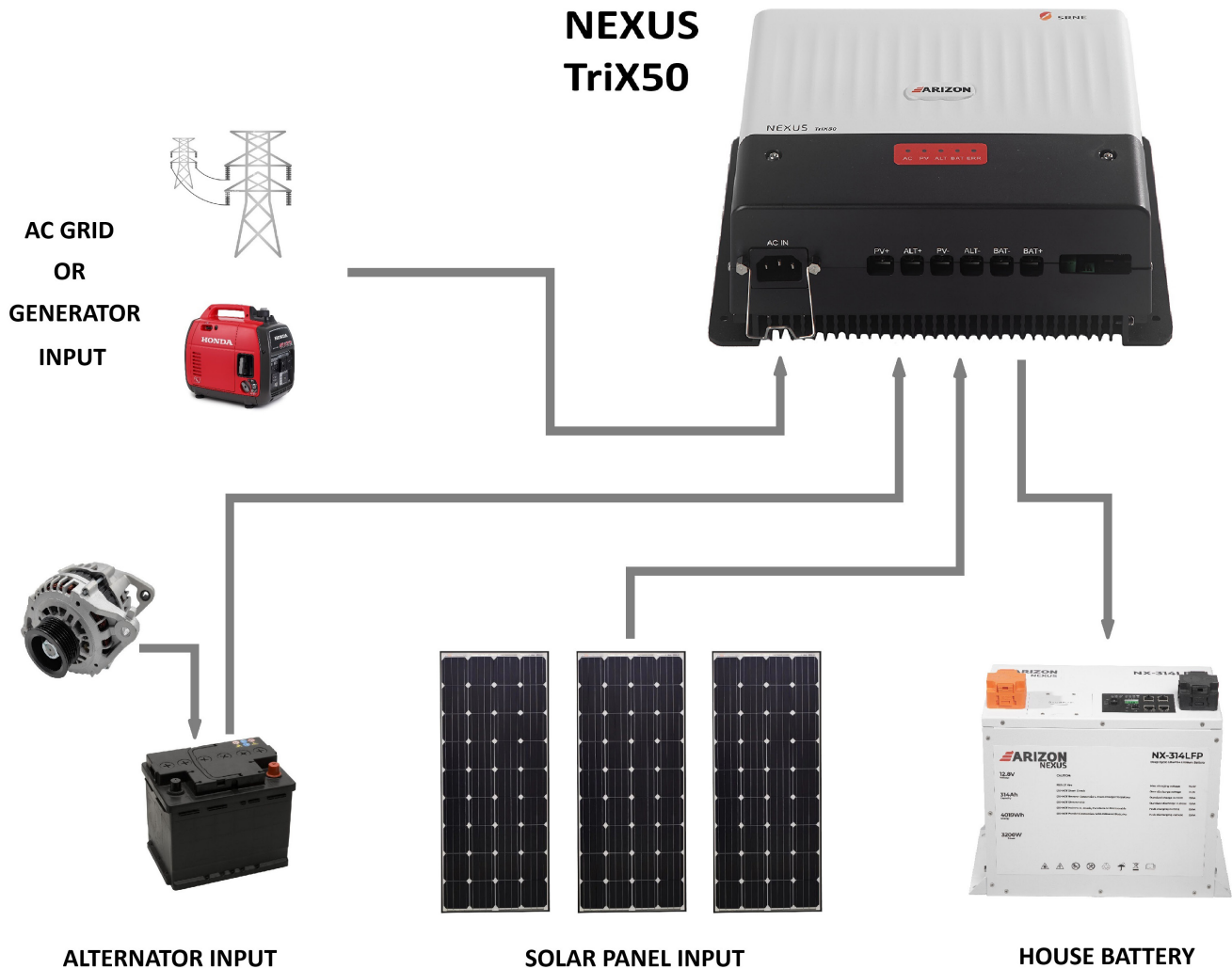
Ventilation Requirements

- Install in open or well-ventilated areas.
- DO NOT install in sealed compartments or enclosed cabinetry.
- Maintain at least 50mm - 75mm clearance on all sides.
- Operating temperature: -35 - 65 °C (derating may occur above 40°C).

Mounting Surface

- Mount on non-flammable, heat-resistant surfaces such as HDPE board or aluminium.
- DO NOT mount on timber, carpet, or low-heat plastics.





Legal Disclaimer

IMPORTANT NOTICE:

This product must be installed in accordance with the above specifications and safety instructions.

Arizon Off Grid Pty Ltd assumes no responsibility for damage, injury, or loss arising from incorrect mounting, poor ventilation, or non-compliance with installation requirements.

By installing or using this unit, the installer and/or end-user acknowledges understanding and acceptance of these terms.