



NitroX[®]

50KW 3Ph-5G
PV Solar On Grid Inverter

 Max. 4 MPP trackers, Max. efficiency up to 98.7%

 Zero export application, VSG application

 Built-in string intelligent monitoring

 Built-in AFCI

 Wide output voltage range

 Anti-PID function (Optional)

10 YEARS WARRANTY **5 YEARS REPLACEMENT WARRANTY**
TERMS & CONDITIONS APPLY

 **IP65**



Smart PV Monitoring Platform
(Inverex Cloud)

Model	NITROX-50KW
PV String Input Data	
Max. PV Input Power (kW)	65
Max. PV Input Voltage (V)	1100
Start-up Voltage (V)	250
MPPT Voltage Range (V)	200-1000
Rated PV Input Voltage (V)	600
Max. Operating PV Input Current (A)	40+40+40+40
Max. Input Short Circuit Current (A)	60+60+60+60
No. of MPP Trackers/ No. of Strings per MPP Tracker	4/3+3+3+3
AC Output Side	
Rated AC Output Active Power (kW)	50
Max. AC Output Apparent Power (kVA)	55
Rated AC Output Current (A)	75.8/72.5
Max. AC Output Current (A)	83.3/79.7
Rated Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un
Grid Connection Form	3L/N/PE
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Total Current Harmonic Distortion THDi	<3%
DC Injection Current	<0.5%In
Efficiency	
Max. Efficiency	98.7%
Euro Efficiency	98.1%
MPPT Efficiency	>99%
Equipment Protection	
DC Polarity Reverse Connection Protection	Yes
AC Output Overcurrent Protection	Yes
AC Output Overvoltage Protection	Yes
AC Output Short Circuit Protection	Yes
Thermal Protection	Yes
DC Terminal Insulation Impedance Monitoring	Yes
DC Component Monitoring	Yes
Ground Fault Current Monitoring	Yes
Power Network Monitoring	Yes
Island Protection Monitoring	Yes
Earth Fault Detection	Yes
Overvoltage Load Drop Protection	Yes
Residual Current Detection (RCD)	Yes
Surge Protection Level	TYPE II(DC), TYPE II(AC)
Interface	
Communication Interface	RS485/RS232 /WiFi/LAN
General Data	
Operating Temperature Range (°C)	-25 to +60°C , >45°C Derating
Permissible Ambient Humidity	0-100%
Permissible Altitude (m)	4000m
Noise (dB)	<50
Ingress Protection (IP) Rating	IP 65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Cabinet Size (WxHxD mm)	434x570x243 (Excluding Connectors and Brackets)
Weight (kg)	37.1
Warranty	10 Years (5 Years Replacement Warranty)
Type of Cooling	Intelligent Air Cooling
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2