



THE POWER OF TOMORROW. TODAY

POTENZA RANGE

GRID CONNECTION AND IMPROVEMENT



SUPPORTING DNOS AND BUSINESSES WITH THEIR LOW CARBON INITIATIVES

Turbo Power Systems offers a unique range of globally acclaimed inverters that enable both Distribution Network Operators and Businesses to maximise the available capacity from their existing electricity networks.

POTENZA Distribution Grid Inverters (DGIs) from TPS are unique in that they can be used in numerous applications due to their ability to maximise capacity from the incoming electricity supply and, if required, form and manage micro grids for creation of additional localised capacity. DNOs can use the DGI to create smart grids, deploying it for Soft Open Points, resilience schemes and voltage regulation devices, such as STATCOM, to dynamically maximise network capacity and power quality.

Businesses can use DGI for connection of Distributed Generation, creation of Uninterruptible Power Supplies and to facilitate Electric Vehicle charging where otherwise significant network upgrades would be required. The DGI enables EV installers and operators to create localised capacity through the creation of a DC microgrid to support chargers, storage and on-site generation. Additionally, the DGI optimises the existing AC supply capacity by improving power quality and balance of phases that can otherwise be unbalanced where using grid supplied fast chargers. This enables the EV charge point operator to deploy more chargers for a given electricity supply capacity without expensive, and potentially prohibitive, upgrades to the network itself. Using latest Silicon Carbide power semiconductor device technology, the DGI is totally silent and achieves outstanding efficiency whilst being air cooled to maximise reliability and ease of installation.

This exceptionally flexible piece of equipment is compatible with TPS' own VELOX Ultra-Rapid chargers and DC to DC converters for battery storage and distributed generation.

Model	DGI-240	DGI-360
Installation / IP Rating	Outdoor / IP 56	Indoor / IP 31
Power Rating	240 kVA	360 kVA
Peak Efficiency	98%	98.3%
Dimensions		
Without neutral cabinet option	<2560 (w) x 532 (d) x 1710 (h)	700 (w) x 665 (d) x 2040 (h)
With neutral cabinet option*	<2560 (w) x 532 (d) x 1710 (h)	1400 (w) x 665 (d) x 2040 (h)
Phase Balancing capability*	Operation at up to 100% phase-rating imbalance possible	
Switching Frequency	20 kHz	
Noise	<56 dBA	
Ambient Temperature	-20 to +35 °C	
Connection Voltage	400 V / 3 Phase	
Total Harmonic Distortion	To Engineering Recommendation G5/4-1 with grid harmonic cancellation possible up to 7 th harmonic	
Electrical Safety	CE conformity according to EMC and LV directives	
EMC Compliance	To EN61000-2-12, EN 61000-4 parts 2,4,5,6, 11 and 13 & EN 61000-6-4	

*NOTE: Addition of 'neutral cabinet' enables phase power balancing

TPS is a leading UK designer and manufacturer with over 45 years of expertise in delivering cutting-edge transportation and critical infrastructure industrial electrical energy systems.

We will be happy to discuss your project or enquiries further, please contact our sales department at sales@turbopowersystems.com or ring us on +44 (0) 191 482 9227



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