

**Chloride UPS Systems
WORLD HEADQUARTERS**

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CHLORIDE
POWER PROTECTION
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GOST certification



PRODUCT SERVICE



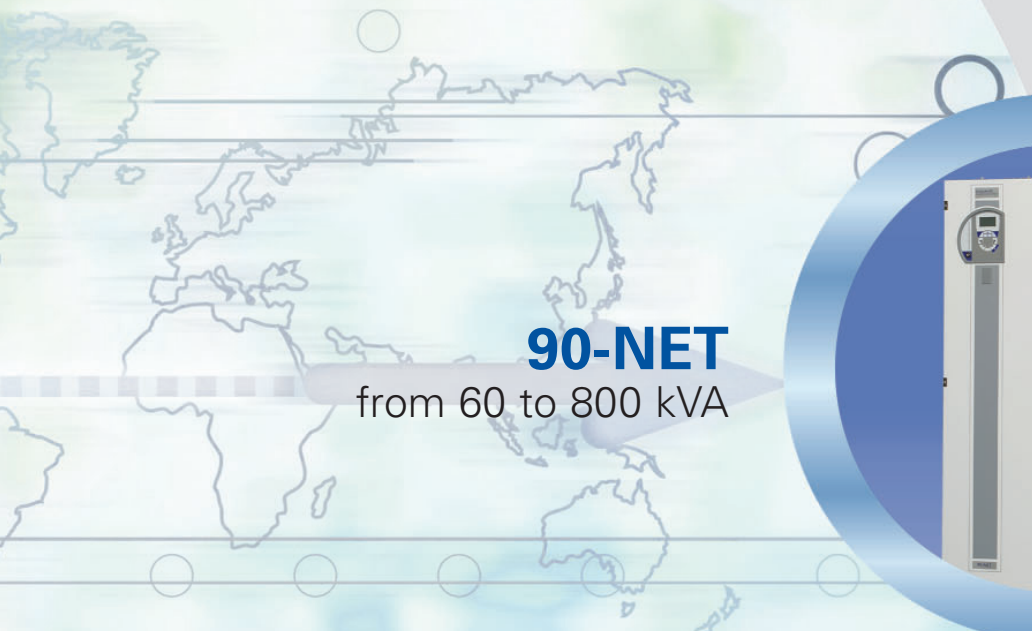
Certificate No. EMS 76732



Certificate No. FM 11043



CHLORIDE
POWER PROTECTION



90-NET
from 60 to 800 kVA



UNINTERRUPTIBLE POWER SUPPLY

90-NET from 60 to 800 kVA

The Range

Chloride's 90-NET family is available from 60 to 800 kVA and is compatible with a wide range of battery autonomies. Aspects of 90-NET's premium class performance are:

- Single-cabinet industrialisation up to 500 kVA, saving floor space and allowing for speedy commissioning
- Low input distortion, featuring THDi<5% without the need for bulky and expensive options and bringing significant benefits in terms of reliability
- High conversion efficiency (certified from 92-93%), allowing reduction in operating costs
- Capability of powering state-of-the-art IT loads with high PF, depending on the UPS rating.

Flexibility for Customised Solutions

90-NET can be fully adapted to meet diverse requirements in terms of battery backup time, power, redundancy and harmonic control.

90-NET is fully compatible with CROSS, Chloride's static switch assembly. CROSS provides additional protection against potential problems in the power distribution system by immediately switching to reserve in the event of a fault. Other options include:

- Galvanic isolation transformer
- Flexible paralleling configurations
- Wide remote connectivity capabilities (TCP/IP, SNMP, J-Bus, Profibus, RS232 etc.)

Leading Technology

Chloride employ patented Vector Control technology (patents: 95 P3875, 95 P3879 and 96 P3198) to increase the performance of power components and enable active conditioning of the load, bringing the following benefits:

- Improved performance for specific unbalanced load conditions
- Perfect load sharing between parallel connected UPS systems (less than 5% tolerance of any system output load fraction from 0 to 100%).
- Improved fault clearing capacity (with a peak of 200% of the inverter nominal current up to 5s) for downstream short circuits.
- Reduced ownership costs through quick installation times and reduced servicing.

Reliability

90-NET uses intelligent double conversion technology.

This architecture combines the secure power provided by double conversion with the efficiency provided by digital interactive technology.

Up to eight 90-NET units may be connected in parallel, allowing Chloride to customise and adapt our solution to your changing load requirements. 90-NET is available in the following configurations:

- Distributed Parallel; increasing power of the supply system whilst controlling costs;
- Centralised Parallel; using an additional common output cubicle and providing a standby reserve line for the whole system, and;

- HFC (High Fault Clearance) Parallel; enabling simultaneous switching on of all available standby reserve lines, with a downstream fault clearing capacity four times higher.

Communication

The system is fitted with a twin serial port, a slot bay for expansion cards and a computer interface.

A graphical liquid crystal display provides clear multilingual information on operating parameters.

90-NET is fully compatible with Chloride's suite of connectivity solutions which allows users to preserve critical data and perform a controlled shutdown of equipment in the event of a power disturbance.

Monitoring

The 90-NET family is fully compatible with LIFE.net, Chloride's real-time UPS remote monitoring tool. LIFE.net is the nearest you can get to having a Chloride engineer permanently onsite. This service provides:

- Continuous real time monitoring of your UPS
- Automatic transmission of a daily status report
- Real time diagnosis of all UPS operational parameters
- A remote fix capability
- Monthly UPS Operational status report
- Technical advice regarding the operation of your UPS.
- The data collected by LIFE.net provides Chloride engineers with a detailed history of operation over the full service LIFE of the UPS system.
- Unique ETS function for trouble shooting of the most common operating anomalies
- Power Quality Monitoring to effectively monitor power disturbance trends

Applications

90-NET provides secure power infrastructure for a wide range of applications including:

- Commercial processing systems
- Industrial automation
- Broadcasting and telecommunications systems
- Data centres.

Secure Power Always

The correct installation of your UPS is only the start of your relationship with Chloride. We are pleased to offer a range of maintenance plans which will:

- Help deliver reliability to your load
- Extend the life of your power protection equipment
- Optimise your capital expenditure
- Provide risk management at a fixed cost
- Provide a proactive approach to disaster recovery.

Contact your local Chloride sales office for more information.

Delegate your power management to the experts.

90-NET	60	80	100	120	160	200	250	300	400	500	600	800
TECHNICAL CHARACTERISTICS												
Apparent nominal output power at 25° C (kVA)	66	88	110	132	176	220	275	330	440	550	660	880
Apparent nominal output power at 40°C (kVA)	60	80	100	120	160	200	250	300	400	500	600	800
INPUT												
Nominal mains input voltage/voltage tolerance (V)	400 ± 15% (380 V, 415 V selectable) three-phase											
Minimum input voltage w/o battery discharging	-25%	-25%	-25%	-25%	-25%	-25%	-20%	-20%	-20%	-20%	-20%	-20%
Nominal bypass input voltage/voltage tolerance (V)	400 ± 10% (380 V, 415 V selectable) three-phase + neutral											
Nominal input frequency/frequency tolerance (Hz)	50 ± 5% (60Hz selectable)											
Input current distortion at maximum input power THD (%)	5*	5*	5*	5*	5*	5*	5	5	5	5	5	5
OUTPUT												
Nominal output voltage (V)	400 (380 V, 415 V selectable) three-phase + neutral											
Output voltage stability by load variation 0 - 100% (%)												
static	± 1											
dynamic	Complies with IEC/EN 62040-3, Class 1											
Output frequency (nominal) (Hz)	50 (60 Hz selectable)											
Output frequency variation (%)												
with mains synchronisation	± 0.75 (1.5, 2.5, 6.0 selectable)											
with own reference	± 0.05											
Inverter overload capacity	125% for 10 min., 150% for 1 min.											
Nominal output power factor	PF 0.8											
Automatic adjustment of nominal power with temperature	110% at 25° C, 100% at 40° C											
GENERAL												
Operating temperature (°C)	0-40											
Recommended battery temperature (°C)	+15/+25											
Relative humidity (without condensation at 20° C)	<90%											
Protection level	IP 20											
Colour	RAL 7035											
Noise at 1 m (dBA)	62	62	62	64	65	65	68	68	70	72	75	75
AC/AC efficiency (%)												
in double conversion mode	92	92	93	93	93	93	92	93	93	93	92	92
in digital interactive mode	97											
Parallel configuration	up to 8 units in modular configuration; up to 7 units plus system static switch in HFC and centralised configuration											
DIMENSIONS AND WEIGHT												
Height (mm)	1780	1780	1780	1780	1780	1780	1780	1780	1780	1780	1780	1980
Width (mm)	820	820	1020	1020	1420	1420	1620	1620	1620	2020	3860	3860
Depth (mm)**	830	830	830	830	830	830	830	830	830	830	1030	1030
UPS weight (kg)	660	660	720	875	1290	1290	1880	1880	2080	2580	3960	4820

* With "LowTHDi" option ** Without front handle (+28 mm with front handle)